**PROSPECTS FOR RAILWAYS**

*See Page 2*

MODERN TRANSPORT

"THE TIMES" OF THE TRANSPORT WORLD

**HANDLING AIR BOOKINGS**

*See Page 5*

VOL. LXXXI No. 2088 [Registered at the G.P.O. as a newspaper] LONDON, APRIL 4, 1959 PRICE NINEPENCE

# CURRENT TOPICS

### Reviewing a Successful Fifty Years

AS a preliminary to the celebration this coming weekend of the Golden Jubilee of the Railway Students Association, Mr. S. B. Taylor, chief secretary of the British Transport Commission, presented to a meeting of the R.S.A. at the London School of Economics on March 25 his paper "Railway Students Association: The First Fifty Years." In this he emphasised the cohesion which had been given to the work of the association by the feeling that all were students who had shared a common interest —that of railways—although the field over which the many valuable papers contributed to the proceedings during the years had been wide indeed. He referred also to the successful series of conventions which has followed the initial venture at Leeds in 1930. Some had been held abroad and the hospitality accorded by the foreign railway undertakings had been really remarkable. Membership of the association in the first year was 245 while in 1954-55 during the presidency of Sir Reginald Wilson it had passed the 1,000 mark —a great triumph for all who had worked so hard in its interests. Today there were some 50 vice-presidents, all of them distinguished men in the transport industry—a situation in keeping with the much larger association. The past and present office-holders and committee-men must be proud of their handiwork just as the members, in their turn, were proud of what they had done.

### New Thoughts on Signs

SIGNPOSTING on the new motorways is engaging a good deal of consideration in Berkeley Square just now and an experimental set on the Preston Bypass incorporates what we have long advocated—the use of lower-case lettering to make for easy reading. It was surprising—and most interesting—to find the size and characteristics of these signs strongly attacked in a letter to *The Times* by a famous printer, Mr. Brooke Crutchley. As was explained by Mr. Noel Carrington in a subsequent letter, the size and placing of the signs has been determined by practical experiments as to what a driver can see at high speeds and the distance that must be allowed to transfer from the fast to slow lane and thence to a deceleration lane for leaving the motorway. It is strange that a printer should query the use of lower case lettering for quick recognition, since printers set text in lower case for the benefit of easy reading. The smaller size which can be permitted to carriage destination boards on Continental railways is attributable to liberal use of letters other than capitals. Thick and thin strokes, for which Mr. Crutchley has a hankering, do not add to legibility of signs. British transport undertakings have, indeed, been leaders in the development of type faces distinguished for clarity. The face evolved by Edward Johnston for the London Underground group in 1917 was followed by Eric Gill's popular Gill Sans type produced for the London and North Eastern Railway in the following decade.

### Nigerian Railway Progress

DESPITE the fact that for five and a half consecutive months the Nigerian Railway operated at a level never previously equalled, the loss on working for the year ended March 31, 1958, was higher than estimated. This fact is recorded in the general manager's annual report submitted to the Minister of Transport by Sir Ralf Emerson, chairman of the Nigerian Railway Corporation. It had been anticipated that a loss of some £437,000 would be sustained, after payment of fixed interest charges, in view of the poor ground-nut and cotton crops of 1956 and the hope of a speedy return to normal. In the final outcome, although the remnants of the 1956 crop were cleared by June, 1957, the interim period until the new crops became available in October was less barren, operationally and financially, than had previously been feared, and the 1957 crops were exceptionally large. Moreover, import traffics remained very buoyant and produced a situation, exceptional for this railway, of a consistent and sustained period during which northbound traffic substantially exceeded southbound. Nevertheless, by mid-October railway gross earnings were £1.5 million less than in the corresponding period of the previous year and the net loss on working, before payment of any interest charges, was no less than £524,000. Actually, from November, 1957, to March, 1958, rail movement of export crops was sustained at a level much above that at any other period in the railway's history and, indeed, at a level higher than expert opinion had earlier believed possible with the facilities available, and the report congratulates the members of the operating and locomotive maintenance and repair sections of the organisation who were responsible for this all-out effort.

## LEADING FEATURES IN THIS ISSUE


| | PAGE |
|---|---|
| *Portrait* | |
| Mr. A. B. B. Valentine, B.A., M.Inst.T. | 9 |
| *Special Articles* | |
| Prospects for Railways | 2 |
| Transport in South Africa: Progress on Railways, Airways and Harbours | 3 |
| Rigid Collapsible Pallet | 5 |
| Kent Coast Electrification: Multiple Unit Express Stock | 6 |
| British Railways and the Trader: Requirements and their Fulfilment: 2—Reliability; Costs; Streamlining | 13 |
| Road Licensing in Isle of Man; Plea for Revised System | 14 |
| *Modern Airways Section* | |
| Handling Air Bookings: Coping with C.P.A. Route Network | 5 |
| *Regular Features* | |
| Commercial Aviation | 9 |
| Financial Results | 16 |
| Forthcoming Events | 9 |
| Important Contracts | 16 |
| In Parliament | 9 |
| Letters to the Editor | 12 |
| Lorry, Bus and Coach News | 4 |
| News from All Quarters | 8 |
| Road Vehicle Industry | 7 |
| Shipping and Shipbuilding | 16 |
| Social and Personal | 15 |
| Tenders Invited | 16 |


### Catering for Big Business

WHEN he addressed its council recently Sir Arthur Morse, chairman of the British Travel and Holidays Association, took the opportunity to emphasise again that travel was big business and, in consequence, all concerned with it—government, industry and community at large—must recognise that truth. Last year there had been more overseas visitors than ever with a total of 1¼ million and our earnings in foreign currency, including fares to British carriers, had totalled no less than £196 million. The tourist trade was the second largest net United States dollar exporting industry—closely following the motor industry—which this country possessed. It was also an export industry capable of showing in one year an increase of 70,000 visitors who represented earnings of £12 million. That was just the increment of one year's traffic. Sir Arthur was anxious that more hotel accommodation should be available in modern buildings. As it was, many old hotels had been crumbling and had been closed. It should also be remembered that these and many other innovations were not only desirable for the tourist but also for our own people. What was done for the former, if it was good, provided facilities for ourselves and made our own country a more interesting place in which to live and travel. We needed enterprise and thought which would lead to investment in the tourist and holiday industry.

### Drop Forgings on the Screen

RECENTLY shown in London after a Sheffield première was *Drop Forgings in Steel*, an attractive technical film produced by English Steel Forge and Engineering Corporation, Limited, of Sheffield. It is a continuation of the E.S.C. group policy of covering the individual activities of its subsidiary companies as follow-ups to the first E.S.C. general film, entitled *Engineers in Steel*, made a few years ago. This month the film will also be shown in Coventry, Manchester, Glasgow and Newcastle. Moreover, it has been selected for showing at the Festival of Films in the Service of Industry in Harrogate, April 21-24, and is the second E.S.C. film to be honoured in this way, the first being *Forgemasters in Steel* in 1958. *Drop Forgers in Steel* begins with a general introduction to the plant used in the drop forging industry, and describes the metallurgical properties which the drop forging process gives to a component, with a graphic demonstration of the importance of grain flow. A four-throw crankshaft for a commercial vehicle is shown at all stages of manufacture, beginning with the machining of the die blocks and making of the steel—the company is the only producer of drop forgings in the country to make its own steel —and ending with finish machining and inspection. A large variety of E.S.C. drop-forged components for the automobile, petroleum and aircraft industries are also shown, with lively scenes "on location" at the works of users. We found its 35-minute run not a bit too long.

### A Notable Cable Line

LAST autumn the finishing touches were put to a telfer line in Venezuela which claims three world records. It is over eight miles long, it attains a height of 15,750 ft. and one unsupported span is 3,300 yd. in length. A fourth record might be claimed in that work was begun in October, 1957, and was scheduled for completion in 14 months. The new line begins at Mérida, the tourist centre of Venezuela, at a height of more than 4,500 ft. above the sea. The first section takes the route to a height of over 7,500 ft. in the Sierra Nevada, where a 60-bedroom hotel has been built. The next leg reaches 11,000 ft. at La Aguada and overnight accommodation is provided for visitors and skiers who want to adapt themselves to the altitude. The third section ends at an altitude of 13,185 ft. at Loma Redonda, another alpine centre also provided with chalets. The final stage takes the passenger to the summit of Pic Espejo, where a 25-room hotel and climbers' huts are available. To guard the unaccustomed mountaineer against the lack of oxygen, these buildings are pressurised to correspond with an altitude of just over 6,000 ft. The system used on the telfer is a three-cable type, with one carrying and two traction cables. The equipment is French-built and includes aluminium alloy passenger cars for 39 travellers hanging from a 12-wheel carriage with rubber suspension. A 60 cu. metre supply of oxygen is carried in each car and an oxygen factory has had to be built in Mérida to meet requirements.

### Underground Funicular in Haifa

DETAILS have been supplied to MODERN TRANSPORT by the Municipal Corporation of Haifa in Israel of another cable system, the underground line at present being built in the city by the French Compagnie Dunkerquoise d'Entreprises, in association with the Société d'Etude de Transports et des Communications, of Paris. The system, to be called *Underground Funiculair*, will come into operation later this year. It offers a solution to the problem of transporting passengers between the three main districts of the hilly city—the Lower Town, with its harbour and wholesale business; the Hadar Hacarmel district in which the city's main retail and entertainment centre is situated; and the ever-expanding Mount Carmel residential area. At present transport is by buses along congested steep, narrow and twisting roads. Work on the scheme began in the summer of 1956. It affords a straight single line climbing 300 metres or 985 ft., and running for 1,800 metres (1⅛ mile) with four intermediate stations at equal intervals. The entire track lies underground, the depth of the tunnel below ground level varying between 7 and 35 metres; it is on a variable gradient and as steep as 1 in 3 in places. The *Underground Funiculair* will start in the Lower Town, at Khamra Square, and pass under Hanevi'im Street to Hanasi Square on Mount Carmel. There will be four 49-ft. 165-passenger carriages on the cable; the winding gear will be at the Hanasi Square terminus, and equipped with two 675-h.p. motors. A modified Paris Metropolitain pneumatic-tyred track will be used with asphalt strips; the flanges of the railway wheels will be available for guiding the cars. Normal speed will be just under 20 m.p.h. and the throughout journey is expected to take under 6 minutes, with 20-second stops.

### Faster Roads Sooner

THE spate of schemes for road construction which emerges from the Ministry of Transport is becoming so overwhelming that it becomes something of a task to decide which have already been announced and are now being put in hand and which are entirely new projects. It is not to decry the zeal of the Ministry in any way to say that the majority represent the commencement of long-standing schemes, often at a much earlier date than was previously hoped. The latest to undergo the process of invigoration is the £50 million plan to improve 220 miles of the Great North Road betwen London and Newcastle upon Tyne. It was announced recently that work affecting nearly 100 miles of the road and involving expenditure of nearly £23 million would be started within the next 12 months. Stretches of dual-carriageway road are being built to by-pass all congested towns and villages, and rural sections are being improved by the construction of a second road parallel or close at hand to the old one which will then be made one way. Work is to begin shortly on the Biggleswade (2¾ miles for £¾ million) and Stamford (4½ miles for £1½ million) by-passes, while the Stevenage by-pass, which will cost £2¾ million, should have been begun before the end of the year; the Grantham by-pass should also be started and that for Catterick is already being built. Constructional work on the £5 million motorway 15 miles long to avoid Doncaster should start in the summer; that scheme is part also of the London—Yorkshire motorway project. The Great North Road runs on a natural line, without water crossings more formidable than the Don and without very steep hills. For this reason its rebuilding may be said to offer the country exceptional value in cost per mile. The works are financed entirely by the Ministry of Transport, save for the reconstruction of the Don Bridge for which part of the cost is being borne by Doncaster County Borough Council. Some of the works are being carried out by direct labour schemes organised by the nine county councils concerned and the remainder by contract. With these improvements, including the removal of the Stamford "shoulder breaker" for lorry drivers, the Great North will begin to justify its "A1" designation.

TERRY'S Security Worm Drive HOSE CLIP

Our 100 years presswork experience has enabled us to produce a clip with all the tenacity of the Bulldog.

Immediate delivery of all Standard sizes from stock.

*Sample and price list from Dept. MD*

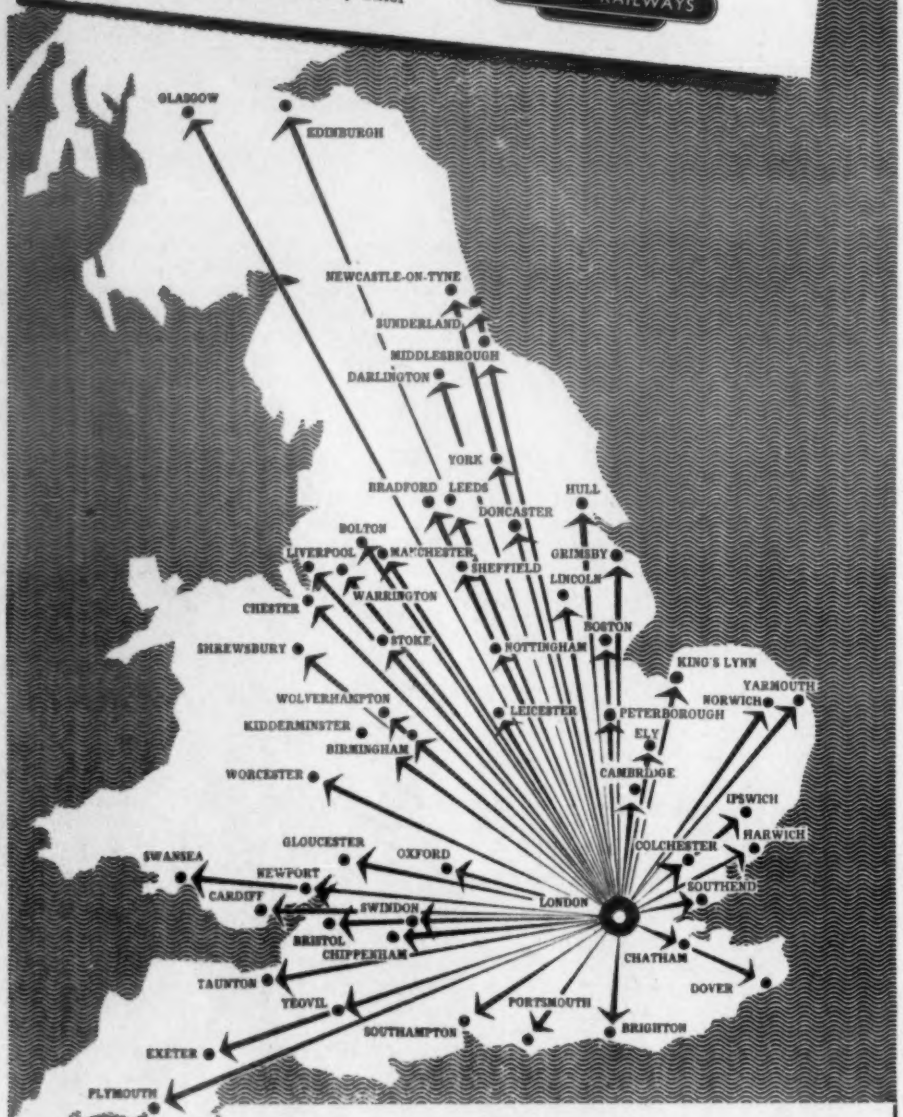
HERBERT TERRY & SONS LTD., *Spring Specialists,* REDDITCH, WORCS

PICKFORDS HEAVY HAULAGE SERVICE
*Abnormal Loads* • *Lifting*
MOBILE CRANES FOR HIRE • Branches in all large towns

NEXT-DAY DELIVERY BY EXPRESS FREIGHT

This map shows some of the many towns to which British Railways Express Freight Services can give next-day delivery for wagon-load traffic. It is a time-table service—and door-to-door transport can be provided. Express Freight charges are competitive with any other form of transport. For further information get in touch with your local Station-master or Goods Agent. He'll supply you with all the details you need.

BRITISH RAILWAYS




BRITISH RAILWAYS
EXPRESS FREIGHT

MODERN TRANSPORT

Published Every Friday

RUSSELL COURT, 3-16 WOBURN PLACE, LONDON, W.C.1

Telephone Number: TERminus 0303 (3 lines)
Telegraphic Address: Transpubco, Westcent, London

ANNUAL SUBSCRIPTIONS
BRITISH ISLES, 35/-; CANADA, 32/6;
ELSEWHERE ABROAD, 35/-
payable in advance and postage free

***The Editor is prepared to consider contributions offered for publication in MODERN TRANSPORT, but intending contributors should first study the length and style of articles appearing in the paper and satisfy themselves that the topic with which they propose to deal is relevant to editorial requirements.***

## *Prospects for Railways*

OVER a period of two centuries the railway, as a transport machine, has shown itself unsurpassed, first as a means of spreading the weight of a moving load evenly over indifferent foundations and secondly for what might be termed mass-production transport. Actual movement costs on rail are so low that if traffics are both intense and well distributed over the day or the year the otherwise heavy overheads bear negligibly on each unit of traffic. Furthermore it can offer immense capacity and has very high speed possibilities which justify modernisation schemes at present being carried out on many railways throughout the world. These facts appear, despite the numerous body of railway enthusiasts to be found in every country, to be imperfectly understood and Jeremiahs who freely foretell the end of the railway era are often encountered. The question they pose is this: granted present-day knowledge of the competitive powers of aircraft and road vehicles, would anyone build a new railway system today? Japan provides an answer. The Japanese National Railways, faced by immense traffic growth on the 300-mile route between Tokyo and Osaka, proposes not a mere addition to facilities on the existing 3 ft. 6 in. gauge electrified railway but the construction of an entirely new 4 ft. 8½ in. gauge line designed to take advantage of speeds up to 155 m.p.h. and of modern door-to-door freight methods such as piggyback transport. Although the low level of average personal income in Japan precludes the volume of airway and private car competition which might be anticipated in Europe, the economic investigations pursued before the railway project was made public show that the projected trunk railway will be able to conduct freight transport at less than 20 per cent of haulage costs on the parallel super highway also to be built and that passenger seat-miles can be provided in the trains at substantially less than in motor coaches. At ordinary fares and charges a handsome profit is therefore expected on the huge investment involved.

### *Course of Modernisation*

EVENTS on the other side of the world may thus give encouragement to those at home who believe in the future of railways and even enhearten those who have expressed fears as to the viability of the railway as a machine. Neither Government nor British Transport Commission are going back on the basic principles of the modernisation scheme of 1955, but some of the details may be changed in the light of later events and B.T.C. recommendations on this will shortly be made known, as will its workshop manufacturing policy. As an American said in an Institute of Transport discussion when advocating dieselisation in motive power and the suppression of steam, one must "go the whole hog" if maximum benefit is to be obtained; it may be hoped, therefore, that in some directions there will be a further development of the modernisation plan. Eventually, apart from dieselisation, surely the West Coast electrification must go to Glasgow, the East Coast at least to Newcastle upon Tyne and the Eastern Region Bishops Stortford venture through Cambridge to Whitemoor, while that to Ipswich should follow the hourly service to Norwich. On dense traffic routes—and many others could be cited — there can be little doubt of the long-term method of securing maximum economy. Other schemes, particularly those affecting freight traffic, must be urged towards early completion for the development of door-to-door facilities in short and reliable transit times and the acceleration of general merchandise service by additional fully fitted trains, concentration of marshalling yards and reorganisation of depots and cartage arrangements. In the meantime the first public operation of 25,000-volt trains by the Eastern Region between Walton, Clacton and Colchester is imminent and two months later the Southern Region will inaugurate the first phase of its third-rail electrification to the Kent Coast.

### *Improving B.T.C. Finances*

THE finances of the Commission remain under the cloud of the traffic recession which made such a heavy impact in 1958; the pause in industrial expansion may be nearing its end, but the reductions in coal traffic and in traffics associated with the steel industry continue to affect the situation severely. Ways open to the Commission to deal with the matter appear to be the long-term one of attracting new traffic by the improvement of facilities and, more immediately, the maximising of revenue and the discarding still more rapidly than in the past of unremunerative services. On the freight side the maximum charges scheme will assist the revenue considerably, sometimes by judicious raising of charges and, in certain cases, by massive reductions which will still secure good net revenues that would otherwise have gone to other transport media. On the passenger side the B.T.C. is now probably losing money on most of its facilities and that must be remedied. If the passenger scheme is granted by the Transport Tribunal the Commission realises the need to proceed with caution in raising charges; the mere application to the Tribunal for increased season ticket rates started off fresh syndicates of motor car sharers in the outer London suburbs and those who give up rail travel do not resume it easily, traffic congestion on the roads or no. Nevertheless, workmen's concessions have long been recognised as an anachronism and the season ticket holder does get a good deal of cheap travel, down in some cases to ½d. a mile, while he forms part of the maximum demand machinery which causes the provision of vast quantities of equipment that is employed on perhaps two well-loaded journeys a day. The basic price of passenger travel in Britain has gone up since 1939 far less than most commodities. As to cutting off unremunerative facilities, it seems the B.T.C. is getting a rather freer hand in closing wayside stations and lines of such calibre as the M. and G.N. Many of the hopeless cases of stations remote from the towns or villages they purport to serve have now been tackled. In our view still more drastic and rapid action is necessary, probably in conjunction with schemes for improved co-ordination with bus operators at the intermediate stations selected for retention. Railway inquiry offices do not yet sufficiently reflect the fact that they are representative of a *transport* undertaking. But we recognise that particulars of country bus services here need a very large rack of books (as in Ribble model inquiry offices) compared with, say, one volume which shows the much less intense interurban Bundesbahn and Bundespost services in Western Germany.

### *Labour Relations*

ANOTHER question mark for the Commission is its railway labour relations. We believe the B.T.C. wants its men to be adequately remunerated and to feel that they receive a sufficient reward, even if the numbers employed are destined to diminish under carefully designed redundancy arrangements as the system is streamlined and raised in efficiency. That was one reason for the independent inquiry which is investigating railway pay in comparison with other industries under Professor Guillebaud. Although the inquiry has taken some time to get going—largely out of deference to the unions on procedure—it is not taking an unreasonable time compared with some corresponding investigations, such as that for the Post Office. To press a wage claim while it is in progress would appear inimical to its success; in fact, it would probably completely nullify anything done so far. As we go to press we learn that the National Union of Railwaymen intends to continue with its claim. We commented on prospects in our March 21 issue and we hasten to admit to a mistaken forecast. We share in what must be fairly general gratification that the Associated Society of Locomotive Engineers and Firemen and the Transport Salaried Staffs Association will not participate in a general railway wages application. The secretary of the latter, Mr. W. P. Webber, stated after a joint meeting: "We have made it clear that the present time is inopportune to make a new claim which can only be related to the cost of living." Mr. A. Hallworth, A.S.L.E.F. secretary, said it was not in the interests of the membership to go forward at present with another wage application. He added that it would be highly regrettable if anything should now arise to hinder the all-important task of the Guillebaud committee. Railwaymen are a splendid body of men; looking from the outside it is clear that their future prosperity is bound up with that of their employer and co-operation in the success of the independent investigation, as in productivity on the railways in general, can lead only to the good of the majority.

[Forthcoming Events appear on page 9]

# TRANSPORT IN SOUTH AFRICA

## *Surplus of Over £4 Million Reported*

### PROGRESS OF RAILWAYS, AIRWAYS AND HARBOURS

IN his report for the year ended March 31, 1958, Mr. D. H. C. du Plessis, general manager, South African Railways and Harbours, states that, after allowing for a total appropriation from revenue of £2.525 million, a surplus of £4.349 million was reflected at the end of the year in respect of the operation of all services. Of the total appropriation, £1 million was contributed to the renewals fund and £1.5 million allocated to the betterment fund. Of the year's surplus, £2 million is being used for the construction of departmental quarters and the remainder to strengthen the rates equalisation fund.

In comparison with the previous year the revenue from railway transport services increased under all heads with the exception of passengers and mails, the principal reasons for the increase being a general increase in the tonnages of revenue-earning traffic conveyed and the tariff increases, with effect from April 1, 1957, on certain commodities. Expenditure in respect of rail services reflected an increase over the figure for the previous financial year, the principal factors responsible being salary and wage increments and the appointment of additional staff; additional material requirements for heavy repairs to steam locomotives, coaching and goods stock; additional running expenses resulting from increased train mileage; increased depreciation arising from the additional assets placed in service, and greater activity at the harbour termini resulting in increased salaries and wages; additional costs in respect of station equipment and heavier compensation payments also contributed to the increase.

#### Freight Traffic

The total tonnage of all classes of goods traffic conveyed by rail during the year under review amounted to 77,004,436, an increase of 1,972,812, or 2.63 per cent, over the record figure for the previous year. A traffic review made about three years ago revealed that the department would not be able to convey traffic during 1956-57 and 1957-58 on a scale which would more or less maintain the increase reflected in 1955-56 owing to the following factors: (*a*) With the exception of one or two doubled sections of the Natal main line, comparatively few additional track facilities would become available during 1957; and (*b*) sufficient tractive force would not yet be available fully to utilise such additional track facilities. This was borne out by the fact that whereas traffic conveyed during 1955-56 showed an increase of 3.7 per cent compared with the previous year, only 0.6 per cent more goods were transported during 1956-57 and, as stated, 2.63 per cent more during the past financial year.

During the year only 28 electric and 39 steam locomotives (Class GMAM) were placed in service, but the department's net gain in steam locomotives, owing to scrappings, was only 23; merchandise carrying capacity increased by 83,456 tons. Before 1955 there was a lack of both facilities, tractive effort and wagons. Facilities increased appreciably on certain sections during 1955 and 1956 and to a small extent during 1957 while additional wagons were placed in service. However, the shortage of tractive power has continued to be a problem owing to the fact that the department's programme for the acquisition of new locomotives had to be suspended until such time as a decision was reached regarding dieselisation and/or electrification of various sections of line. A small number of locomotives was ordered and delivered as an emergency measure, but the available tractive force was not sufficient to enable the additional facilities and wagons to be employed to full advantage. Bad weather and flood conditions adversely affected the year's working.

#### Major Betterment Works

Apart from the shortage of engine power, the department was faced with bottlenecks on certain sections. Electrified working has, however, since been introduced from the Reef to Klerksdorp, remotely controlled interloops have been completed between Warrenton and Belmont and between Poupan and De Aar, and double-line working has been introduced between Belmont and Wigton and between Orange River and Poupan. Introduction of electrified working to Klerksdorp as from December 1, 1958, enabled the Western Transvaal system to release steam locomotives for allocation elsewhere, and the redistribution programme of tractive power makes provision for assistance to the Cape Northern and Orange Free State systems. The main difficulties experienced on the section Welverdiend—Klerksdorp—Beaconsfield, and on the Postmasburg line, will disappear progressively, and matters will be further improved when the remotely controlled interloops between Warrenton and Klerksdorp are all completed during the first half of 1959, and the centralised traffic-control sections on the Postmasburg line begin to come into service towards the end of 1959.

In addition to the electrification of the track between Welverdiend and Klerksdorp, improved crossing places with centralised traffic control are to be provided between Potchefstroom and Klerksdorp and these measures, together with electrification of the section, will greatly improve the track capacity and expedite the passage of trains.

Four remotely controlled interloops are now being introduced on the Hamilton—Beaconsfield section and centralised traffic control on the Hamilton—Springfontein section; until these additional facilities are available clearances will be increased by double-heading. The North Coast line of Natal presents one of the department's most serious problems and it will unfortunately still be some time before adequate relief can be provided.

#### Other Improvements

Doubling of the Natal main line is completed to Ladysmith except between Boughton and Cedara where the twin tunnels are expected to be finished by December, 1959. Doubling of the line between Glencoe and Newcastle has been authorised and will be completed by the middle of 1962. The section between Volksrust and Union is being deviated where necessary to improve the gradient from 1 in 70 to 1 in 80 compensated. The line between Brakwal and Van Reenen is being regraded to 1 in 50 compensated in order that increased loads may be hauled over the Danskraal—Harrismith electrified section. When the regrading of this line is completed it will be practicable to increase train loads materially, and the question of additional facilities between Harrismith and Kroonstad requires attention to obviate the breaking-up of through up loads at Harrismith and to ensure the dispatch of through down loads either direct from Kroonstad or from Bethlehem.

Electrification to Kroonstad will be completed by about September, 1959, and to Witbank by December, 1960; completion of these two projects will permit of further redistribution of steam power. Electrification between Beaufort West and Touws River is in progress and should be completed during 1961, when the loads of trains will be increased from 944 to 1,560 tons. Reduction in point-to-point running times will further increase the capacity of this section. A number of the Class 25 condensing locomotives now employed on the Beaufort West section will, on completion of the electrification, be allocated to the Postmasburg line for the specific purpose of overcoming the water difficulties experienced on the branch line.

The Cape Midland main line has been regraded north from Alicedale to Cradock and the work of regrading between Cradock and Rosmead is proceeding. Crossing loops between Springfontein and Queenstown on the Cape Eastern main line are being lengthened, and on the Eastern Transvaal system measures for increasing track capacity on the Pietersburg line are under consideration.

#### Airways and Harbours

Yet another year of satisfactory and accident-free operations was recorded by South African Airways. A new record revenue of £8.676 million was reached and the working results of the year reflected a surplus of £647,435. The first two of the seven Vickers Viscount aircraft ordered arrived in South Africa on October 29, 1958, and the remaining five are expected to be delivered in time for their introduction into service early in 1959. Three Boeing Intercontinental jet aircraft have also been ordered at a basic cost of £5,560,773. It is expected that these jet aircraft, which will place South African Airways in a favourable competitive position in relation to other operators on the African route, will be delivered during the period July to September, 1960.

The greatest volume of cargo ever recorded—18.548 million tons—was handled during the year at the major harbours, an increase of 990,850 tons over the previous year's record. The intensity of the harbour activities is demonstrated by a surplus of £5.171 million compared with £4.398 million for the previous year. The large volume of cargo handled resulted in delays to shipping at some of the major ports, particularly at Walvis Bay, where an extra 3,200 ft. of quayage and additional cranes are being provided.

#### Shipping and Road Transport

The results of working the department's steamships, which were employed exclusively on the conveyance of locomotive coal from Lourenço Marques to Cape ports, showed a surplus of £14,718 as against £178,268 for 1956-57. The total accumulated surplus since the inception of the departmental shipping services in 1919 amounted to £1.097 million.

At March 31, 1958, the total route mileage of the road transport services was 28,055, an increase of 472 miles over the previous year. At 2,419,323 tons, goods traffic conveyed increased by 1,674 tons, but this relatively small increase is not a true reflection of the year's traffic potential which, up to October, 1957, proved very promising. Drought conditions in certain areas and the retarded production that followed on the excessive summer rains in Natal and the Eastern Transvaal precluded the road transport service from showing the marked increase in tonnage initially expected. Revenue from passenger traffic increased by £37,677. Working results of the road transport services for the year showed a loss of £100,461, compared with a deficit of £403,540 for 1956-57; 471 new vehicles, comprising five luxury passenger vehicles, 40 country passenger vehicles, 116 goods vehicles (10-ton), 61 heavy hauliers, 158 trailers (10-ton), 50 covered trailers (4-ton), 40 semi-trailers (10-ton) and one 20-ton semi-trailer, were placed in service.

#### Overseas Visit

Mr. du Plessis states that in August, 1958, he sailed from Cape Town on a visit to the United Kingdom and several European countries, the main object of the visit having been to attend the quadrennial meeting of the International Railway Congress Association in Madrid. Many important matters, he says, came under review during the meeting. There was, for example, the rapid development in the use of the long-welded rail, and he found that South Africa in this respect had advanced more rapidly than most other countries. In addition, there were such questions as the further development and improvement of diesel traction; the advantages of electrification; the mechanisation of goods handling; improved maintenance of permanent way and many other matters of a technical nature, all of great interest to railways. Automation, with particular reference to the introduction of electronic equipment, was given special attention and it became clear that railways in general, in common with industry and commerce, are still only in the initial stages as far as the practical application of electronics is concerned. However, all railways are alive to the many advantages of automation as a means of economy in the use of manpower and of improving overall efficiency.

#### Impressions Gained Abroad

Discussions of common problems with leading personalities in the transport world proved of great value. Before, during and after the meeting he took advantage of the opportunity to study various aspects of transport. Technical developments on the French National Railways were most impressive, and he quotes the *Mistral* as one of the fastest trains in Europe, travelling non-stop between Dijon and Paris (398 miles) at more than 96 m.p.h.

Valuable information, for possible application in South Africa, was obtained in the matter of mechanisation and even a measure of automation in the working of marshalling yards. In these respects several European railways, he says, have made considerable progress. Equally impressive improvements were to be seen in signalling techniques and in the methods used to promote safety in railway working. The human element, for example, has

(*Continued on page 12*)

In 1955 G.A.DAY Ltd. wrote—
we now feel that this engine will now complete 400,000 miles before a major overhaul becomes necessary

*Here is the Leyland 'Octopus' that has made history by running three-quarters of a million miles before a first major overhaul!*

THEY WERE WRONG!
*In actual staggering fact, the mileage completed was*

750,000

This 'Octopus' started service in February 1950. Working all round the clock, it has done 1,600 miles a week ever since. At the first major overhaul, after 750,000 miles, new cylinder liners were fitted . . . the first liner change! Pistons and rings were replaced . . . only the third set in the engine life. Valve springs and guides were also replaced. The original crankshaft was refitted, the mains being ground .010 undersize; big ends showed no measurable wear. The camshaft assembly only required a new thrust pad. In the gearbox, one new gearwheel and a set of races was the only attention necessary. Generally, oil has been changed and filters cleaned every 3,000 miles, and replacement injectors every 20,000 miles.

*This world-beating record of reliability speaks volumes for the meticulous attention with which the 'Octopus' was maintained by Messrs. G. A. Day, Ltd. . . . and the wonderful design and workmanship that sets Leyland in a class by itself.*

Leyland OCTOPUS
FOR FANTASTIC ECONOMY

LEYLAND MOTORS LTD.
Sales Division: HANOVER HOUSE, HANOVER SQUARE, LONDON, W.1. Tel: MAYfair 8561

C.P. again for Bournemouth

Ten years ago we supplied the motors and control gear of twenty-four trolleybuses for the Bournemouth Corporation.
Recently the same Corporation ordered equipment from us for thirty new buses and this will be of our latest type with various features of advanced design.
At our Chelmsford Works we have been making electric traction equipment for something over sixty-five years. In the 1890's we supplied electric locomotives for the first underground system, the City and South London Railway, and have amassed a wealth of experience since then. Today we are still at the forefront of traction equipment design, and besides supplying equipment for trolleybuses and other road vehicles, we are equipping underground trains abroad, and some of the latest and most powerful diesel-electric locomotives for British Railways.

Crompton Parkinson LIMITED
MEMBER OF ATOMIC POWER CONSTRUCTIONS LTD.
*One of the five British nuclear energy groups*
TRACTION DIVISION, CHELMSFORD, ESSEX
TRACTION EQUIPMENT
TELEPHONE: CHELMSFORD 3161. TELEGRAMS AND CABLES: CROMPARK CHELMSFORD

LORRY—BUS—COACH

# Coast Lines Buys Trailer Company

WITH the acquisition by Coast Lines, Limited, of the business of Northern Ireland Trailers, Limited, of Belfast and Preston, there is now only one independent trailer and container business (Ulster Ferry Transport, Limited) specialising in the Northern Ireland ferry service, and all the ships used on the three routes, Liverpool—Belfast, Preston—Larne and Ardrossan—Larne, will be controlled by either the British Transport Commission or Coast Lines. Northern Ireland Trailers, formed in 1953, operates on the two last-named routes with three vessels on charter; Coast Lines inaugurated the Liverpool—Belfast route at the beginning of this year.

Northern Ireland Trailers also controls Northern Ireland Warehousemen, Limited, and C.M.P. Shipping Co., Limited, and in August, 1958, it was associated in the formation of U.K.—European Transport, Limited, for Continental trailer services. Its chairman, Major G. B. MacKean, who is chairman of Larne Harbour, Limited, and the directors, Messrs. Ivan Pollin, H. A. C. Catherwood and Brian Mullen relinquish their positions. Replacing them is Mr. Reginald Berkeley, director of the Belfast Steamship Co., Limited, one of the Coast Lines group, and other directors of the parent company. It is stated that the N.I.T. company will continue to operate via the Larne-to-Preston and Ardrossan routes.

## *Extension to Sheffield Station*

LAST Friday Sheffield Transport Department opened a £14,000 extension to the covered accommodation at the Pond Street bus station. It provides for the Peak District services to Castleton, Bakewell and Buxton, and also for Maltby. The new platform is built of prefabricated units and is 360 ft. long and 14 ft. wide. The six loading platforms have queueing accommodation for 500 passengers, with a seven-foot gangway for the movement of other passengers under cover.

## *L.T.E. and Compulsory Arbitration*

HAVING reviewed the situation arising out of the dissolution of the Industrial Disputes Tribunal, London Transport has decided that it is statutorily bound to make provision for the compulsory arbitration of disputes with its busmen. It wrote some time ago to the Transport and General Workers Union proposing appropriate changes in the existing machinery for negotiation. These proposals are now being studied by the full-time union officials and by the 13-man London busmen's negotiating committee. A joint meeting of both sides to discuss them will probably be held shortly. London Transport is also proposing that negotiation (i.e. the stages before compulsory arbitration) should be regularised and the procedure embodied in one document.

## *Another Municipal Salary Award*

THE Industrial Disputes Tribunal, in its award No. 1,220, has found that the appropriate salary range for the general manager and engineer of Salford City Transport should be £2,215 per annum, rising by annual increments of not less than £55 to £2,490 p.a.; at present he is on the maximum of £2,340 provided in Scale I laid down in 1956 by the Joint Negotiating Committee for Chief Officers of Local Authorities. He will now be placed on the maximum laid down in the new scale. Mr. C. W. Baroth was then responsible for the bus undertaking only; since September, 1957, he has responsibility also for repair, maintenance, etc., of 172 other municipal vehicles, but the establishment committee declined an application for additional remuneration. The National and Local Government Officers Association submitted that he should have an additional £400 per annum, the annual saving from the reorganisation being approximately £4,400. The Corporation submitted that the additional duties were balanced by the declining demand for the passenger transport services.

Two off-road scenes: a Bedford 6-tonner, with two-speed rear axle, negotiating the approach to a rubbish shoot and, right, a Dodge 7-ton tipper at Farley Green, near Luton, on the formation of the London—Birmingham motorway

## *Squabble over Jersey Airport Service*

THE motor traffic sub-committee of the States of Jersey Defence Committee has refused an application by Blue Eagle Tours, a coach operating company, to bar the Jersey Motor Transport Co., Limited, from using Jersey Airport as a terminal. For Blue Eagle Tours, which runs an airport-to-town-terminal coach service, it was stated that it objected on the grounds that by agreement with B.E.A. and Jersey Airlines it had been operating a special service for airline passengers since January 1, 1958. This arrangement had been made after Jersey Motor Transport and Tantivy Motors, from whom the airlines had previously hired buses, turned down a proposal that they should in future be responsible for collecting their own fares instead of hiring out their coaches.

A service, which was necessarily uneconomic in winter, is at present run by Blue Eagle Tours to connect with every plane arrival and departure and the firm stated that it was spending a large capital sum in building a town air terminal in St. Helier. On behalf of J.M.T. it was pointed out that a bus service to the airport or that area had been in operation since 1937 and that this service catered for local residents visiting the airport or meeting passengers, and workers at the airport. The committee decided it was in the interest of the general public not to refuse permission to the J.M.T. to use the airport as a terminal, but thought it unfair that this company should advertise in such a way that the air travelling public might consider it to be the official airport service.

## *£20,000 Fines in Suborning Case*

AFTER a nine-day hearing at Leeds Assizes, Bulk Liquid Transport, Limited, road tank operator, of Gildersome, near Leeds, was fined £20,000 and ordered to pay the costs of the prosecution (about £3,000) on charges relating to drivers' hours and records. Appeals are to be lodged. Before the court, besides the company, were:

Benjamin Skelly, traffic manager, Lawrence Ian Hickson, assistant traffic manager, Charles Kershaw, traffic foreman, Cecil Birkenshaw, traffic clerk, and William Jennings, traffic foreman.

All pleaded not guilty to conspiracy to encourage drivers to drive more than permitted hours, conspiracy to encourage drivers to drive without the rest periods required by the law, conspiracy to make false drivers' records, and conspiracy to alter entries in drivers' records.

Birkenshaw was found not guilty and was discharged. Kershaw was found not guilty on first two counts of conspiracy but guilty of the others. The company, Skelly, Hickson and Jennings were found guilty on all four conspiracy counts. The company, Skelly and Kershaw were found guilty on two charges alleging subornation of perjury to which they had pleaded not guilty. Kershaw was gaoled for six months and Skelly, Hickson and Jennings for nine months.

A charge of aiding and abetting in the alteration of drivers' records with intent to deceive, to which the company, Skelly and Kershaw had pleaded not guilty, was dismissed on the direction of Mr. Justice Donovan.

Passing sentence, Mr. Justice Donovan spoke of the grave dangers to public safety in the transport of sulphuric acid by road by drivers who drove beyond the number of hours stipulated by law. While the company had not done so well since October, 1957, it was still a sound concern with ample assets. The fine had to be a heavy one. For the company, Mr. F. H. Lawton, Q.C., explained why no director had been called. Mr. Peter Slater (proprietor also of Peter Slater, Limited), who founded the company in 1954 with an initial share capital of £1,000, was not called, he explained, because at the time when "these matters were boiling up" he was far from being a fit man. It was not any personal reluctance that kept him out.

Prosecuting, Mr. R. Lyons, Q.C., had said it was alleged that the company instructed and encouraged drivers, possibly as a matter of policy, to drive an excessive number of hours and to have on occasions less than ten consecutive hours of rest. The motive, it was suggested, was purely financial. In order to cover up these large-scale breaches of the Road Traffic Act the defendants instructed and encouraged drivers to enter false times and false information in their records. When a driver had entered accurate records which exceeded 11 hours, they instructed him to alter the records and if necessary to rewrite false records. In court, drivers alleged that they were instructed to do journeys in impossible times and not to take meal breaks.

It is stated that the inquiries resulted from a complaint in October, 1957, made by one of the drivers to the Yorkshire area Licensing Authority. Investigation occupied until August, 1958. Information was gathered from all over the country and more than 200 people, gatemen, weighmen, drivers and other employees and officials of large concerns trading with the Gildersome company were interviewed. The photographic department of the West Riding Police at Wakefield tackled the biggest job in its history when asked to photograph the 200 exhibits.

## *Brighton Fares Situation*

IN four years passenger traffic on Brighton's buses has slumped by more than four million. This was stated by Mr. H. G. Baker, general manager of the Brighton, Hove and District Omnibus Co., Limited, when he gave evidence before the South Eastern area Traffic Commissioners at Brighton at the public hearing of the joint application by the company and Brighton Corporation Transport for permission to raise certain bus fares.

The Commissioners allowed the following variations:

The abolition of early-morning return tickets; a cut of one-third of a mile in the distance travelled for 3d.; the reintroduction of a 3½d. fare; adjustments to some children's fares; adjustments to some scholars' term tickets; an increase from 6d. to 9d. in the race special fares between Old Steine and the Racecourse.

Mr. H. J. Thom, chairman of the Commissioners, said the position of the Brighton Corporation justified an increase in revenue. He added: "But if the company had come forward on its own, it might have been quite different. We might have said that in view of the additional profit which it made in 1958 over its estimates, and in view of its substantial liquid assets, it could carry on for some time without this additional sum. But as a joint application, we feel the additional revenue is required by the joint operators."

## *Bus and Coach Developments*

Merriway Tours, Limited, Oldham, applies for the excursions and tours from Oldham of Happiway Tours, Limited.

F. Smalls, Thornaby-on-Tees, applies for the Stockton—Northallerton service of H. L. Walker, Limited.

Eastern Counties Omnibus Co., Limited, applies for the Tattersett—Kings Lynn and West Rudham—Fakenham services of F. A. Wagg.

Replacement of a number of Brighton, Hove and District Transport trolleybus services by buses on March 25 as foreshadowed in our issues of February 14 and 21 was accompanied by the distribution of a neat booklet complete with route diagram showing the extent of the changes and the new facilities provided.

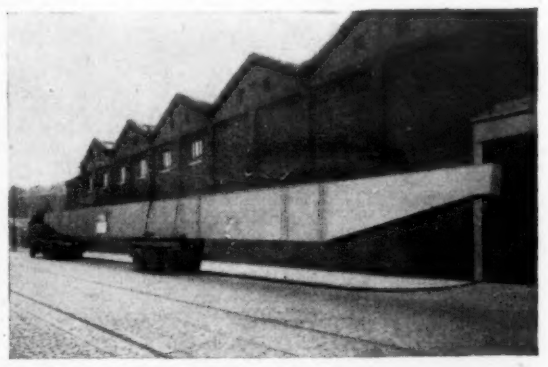
However tricky your load,

B.R.S. can handle it

Circumstances may be against you. But British Road Services are on your side – always. A telephone call to your local B.R.S. depot quickly brings you a helping hand from a nationwide organisation with a willing and experienced staff and a vast fleet of vehicles of all kinds, regularly maintained, and ready to tackle any job, at any time. Modern methods and equipment ensure careful attention to every load, and the B.R.S. teleprinter network provides the means for rapid transmission of your special instructions.

**B.R.S. will go to great lengths to solve your transport problems.**

**A girder for the U.K. Atomic Energy Authority, Caithness — weight 16 tons, length 125 feet, on a B.R.S. vehicle and special bogie — just another of the many and varied services British Road Services render to Trade and Industry.**



*If you find transport something of a problem . . .*

Ring *British Road Services*

*— the best link between dispatch and delivery*

*MODERN AIRWAYS and COMMERCIAL AVIATION SECTION*

# HANDLING AIR BOOKINGS

## *Coping with C.P.A. Route Network*

### PREPARATIONS FOR LARGE JET AIRCRAFT

A TRAPPER who one blustery winter's day made his way to the small town of Aklavik, in the Canadian Northwest Territory and, at the general store booked Canadian Pacific Airlines for a flight from Aklavik to Amsterdam, was making a C.P.A. reservation the hard way, so far as he and the airline were concerned. In direct contrast, reservations staff in Vancouver, which is the headquarters for the C.P.A. international and domestic routes which now serve five continents and 50 communities in Canada, are continually streamlining booking procedures to ensure that passengers will experience no such complications even when big jet aircraft are in operation.

In the near future, C.P.A. will be one of the first carriers to operate Bristol Britannia turboprop air liners on all its overseas routes. In a $21.5 million fleet expansion programme the airline has already increased its international fleet from four to 21 intercontinental aircraft (six Bristol Britannias and 15 Douglas Super DC6Bs). For a considerable time now its reservations staff has been working on a Bristol Britannia expansion project designed to handle smoothly the accelerated flights and schedules and newly designed reservations sales and control offices have been built in Vancouver to accommodate a staff increased by 50 per cent.

#### Intermediate Stage

A good deal has been said about the effects upon the air transport industry of the arrival of high-speed commercial jet aircraft. Attendant problems such as air traffic control, noise and inadequate runway lengths are considered critical in many countries anticipating jet service and airlines have been doing much thinking about ancillary organisation. So far as reservations are concerned, however, C.P.A. anticipates no insurmountable problems. Two factors will facilitate the changeover. The company's Bristol Britannias, with larger seating capacity and higher speed than the present Super DC6Bs, are interim aircraft between conventional piston types and pure jets, and it is felt that this middle step provides the necessary experience, for what is the world's seventh largest airline in terms of unduplicated route-miles, to advance to jets without the sudden onslaught of associated problems affecting the reservations system all at once.

The second factor is the unusual character of the X-shaped international route pattern formed by the airline's longest routes, with its main base and reservations headquarters in Vancouver, at the centre of the X. The 13,460-mile X-stroke from Auckland to Amsterdam links Fiji, Hawaii, Vancouver and Edmonton en route. The other 14,077-mile stroke runs from Hong Kong and Tokyo across the Pacific to Vancouver and on to Mexico City, Lima and Buenos Aires. A shorter route breaks off the X at Mexico City and runs to Toronto. The so-called "sunshine service" extends this segment to Montreal and on over the mid-Atlantic to Portugal and Spain.

#### Vancouver as Centre

Because of the nature of the route pattern centralised control of its reservations system is easily maintained at Vancouver. This is a great advantage in co-ordinating sales and reservations efforts of all the widely separated bases. Vancouver as the central headquarters controls space on all international and domestic flights departing from the city, and some returning flights. For the majority of returning flights, however, control is maintained at the outward terminals. Thus, for example, satellite reservation control centres in Hong Kong, London, Sydney, Montreal and Lima are in a position to readily handle passengers in their respective areas.

The central reservations control centre, with a staff of 44, maintains jurisdiction over all satellite officers. Master control charts in this Vancouver office monitor space on all flights falling within the area of its responsibility. All reservations sales offices concerned report their seat sales to the control office to the point where any given flight is becoming booked to capacity. At a predetermined point, the control office issues a stop sale message. From this time on, all sales offices must request seats. In this manner, flights can be booked to capacity, but not under or over sold. An efficient communication system is, of course, of great importance in the efficient operation of a reservations department servicing the airline's 40,609-mile international and domestic route network.

#### Communications Circuits

Co-operation between C.P.A. technical officers and their counterparts in the communications department of the Canadian Pacific Railway has served to overcome many vital problems. For example, on December 1 last the two concerns started operating a direct transatlantic cable connection between the C.P.R. Montreal headquarters and the European headquarters in London. This two-way underwater cable set-up enables Canadian Pacific Air Lines offices throughout Canada to transmit and receive messages to and from European offices almost instantaneously. Thus an operator in Montreal can feed a perforated tape into a transmitter which produces both a tape and a printed reading copy in the London office. From there communication is maintained with C.P.A. offices in Continental Europe through the teletype circuits operated by the Société International de Telecommunications Aeronautiques, which is, of course, the communication company jointly owned and operated by a number of airlines.

Between Mexico City, Toronto and Montreal on Canada's east coast, and the Mexican capital and Vancouver on the west coast, C.P.A. messages are handled by two other airline communications co-operatives, AIRINC (Aeronautical Radio Incorporated) and RAMSA (Radio Aeronautical Mexicana). Traffic between Mexico City and C.P.A. bases in South America is carried by a combination of governmental aeronautical circuits through Panama, Lima, Santiago and Buenos Aires. To serve the C.P.A. North Pacific route, reservations messages between Vancouver, Tokyo and Hong Kong are handled by commercial cable. On the South Pacific service, traffic is carried over governmental radio teletype facilities operated by Canada, the United States, New Zealand and Australia.

Within Canada, C.P.A. communications are handled mainly by Canadian Pacific Telegraph teletype facilities. In addition, however, messages are sent over radio facilities of the Canadian Department of Transport and the Royal Canadian Corps of Signals, and of course, by telephone. The long distances between stops on the overseas routes tend to assist in overcoming problems which will affect some carriers planning to operate pure jets on short-haul sectors. Some unusual situations arise from the exceedingly long routes. For example on a flight from Amsterdam to Sydney, Australia, the airline considers the Vancouver—Sydney portion a "short haul." This 8,600-mile stretch is probably the longest short haul in existence.

#### Seasonal Flexibility

The scheduling flexibility provided by the balanced seasonal characteristics of the route segments is yet another factor favouring an efficient reservations system. Winter is the best season for Vancouver—Honolulu traffic, which tapers off during the warmer months. Polar Route traffic between Vancouver and Amsterdam, however, is better during the summer. Therefore, the airline reduces Honolulu flights and adds to those on the polar route to keep aircraft where the traffic warrants. Similarly, traffic between Toronto and Mexico increases greatly during the winter, so the two schedules taken off that run in May do not cost much during the slacker summer season between Canada and Mexico.

As with most airlines, the development of the C.P.A. reservations system reflects the growth of the company. Not much more than two decades ago, when airline operations in Canada was mainly of the "bush" variety, a firm booking consisted mainly of the passenger being at the head of the queue when the aircraft was ready to go. When, in 1942, 10 small Canadian carriers amalgamated to form C.P.A., the company had 10 separate reservations systems. Problems of standardisation were encountered because of the numerous types of scheduled and non-scheduled operations. In addition, C.P.A. inherited a 77-plane fleet embracing 20 different types of aircraft.

#### Rationalising Reservations

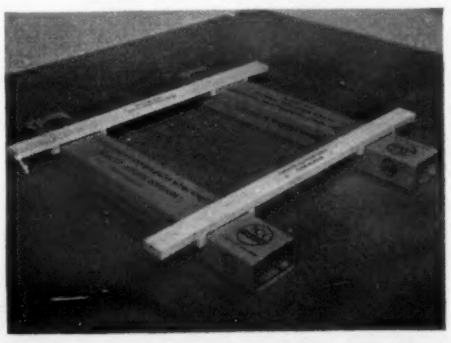
Gradually the domestic route pattern was established and all flights were placed on a scheduled basis. The company was divided into four districts and the reservations system were reduced to four. In attempting to improve reservations service, however, communications difficulties arose. C.P.A. still had a number of important routes reaching deep into the nation's northland where only radio could be used, and this only when atmospheric disturbances were at a minimum. As each communication difficulty was overcome the reservations system improved until a workable arrangement resulted. As the international services developed C.P.A. studied reservations handling methods of the major carriers and because the pattern of the network was particularly conducive to reservations efficiency, it was able easily to adapt features of the systems of other carriers with good results. Today it is felt that, despite the problems that lie ahead, the company's reservations system will be able to handle passengers from Aklavik to Amsterdam with even greater speed and efficiency.

★

# RIGID COLLAPSIBLE PALLET

## Lightweight Unit for Easy Return

A CHEAP lightweight collapsible pallet of the sleeve type is being put on the market by Thomas Manning Sons and Co., Limited, Manchester, operating under licence from I.C.I. Dyestuffs Division, which has applied for patent protection. This piece of equipment is designed for the handling, by fork-lift truck, of paper or hessian sack-packed materials, although other types of packages—provided they are flat-topped, with no projections—can be handled quite satisfactorily on the new pallet. The Manjute rigid pallet, as it is called, is collapsible for easy storage



**Manjute rigid collapsible pallet with wooden deck pieces fitted**

or return transport, occupying only a fraction of the space needed for a wood pallet.

#### Robust Construction

The two sleeves are of welded steel mesh, the entry points being 6 in. wide by 3½ in. deep, with strong fibreboard covers that can usefully be printed with the owner's name and address or with publicity matter. Two or more wooden deck pieces are fitted across the sleeves, forming a light but robust pallet that for most purposes has substantial advantages over the collapsible pallets of the sling or non-rigid type. The pallet can be supplied in different sizes to suit various unit loads. The number of deck pieces can be varied at will.

Manjute rigid pallets cost around 21s. each. They have been in use in I.C.I. Dyestuffs Division sales warehouses for some months past for palletisation of paper sacks, and very favourable reports have been received from customers taking palletised consignments.

*Speed your freight*

**to and from the Continent**
**by**

**SILVER CITY ROADAIR**

*Leaving London*

**LONDON—PARIS**
**transit time 72 hours**
**LONDON—LILLE**
**transit time 96 hours**

Large indivisible loads or small parcels are carried with the minimum of handling on these regular and reliable ROADAIR services. The extremely economical rates include all loading and unloading charges at Lydd (Ferryfield) and Le Touquet airports.

**ASK YOUR FORWARDING AGENT FOR FULL DETAILS**

*Loading at Lydd (Ferryfield)*

SILVER CITY ROADAIR

SILVER CITY AIRWAYS LIMITED

**a better building at LESS COST**

*Typical Clearspan Garage of 75' 0" span. Note monorail over service pits on right.*

Clearspan all steel buildings offer you the fastest and cheapest building technique. Why?
Because Clearspan buildings are STANDARD, ready planned down to the smallest detail and jig built.
The Clearspan range is almost unlimited and 'specials' are available to order.
The Conder technical and erection service is ready to solve YOUR building problem.
*Send for illustrated brochure*

* Spans up to 150 ft.
* Height up to 25 ft.
* Roof slopes 12° - 17° - 22°.
* Lean-to's, Canopies, etc.
* Hoists and Monorails.
* Clean design – no dingy lattice work.
* Virtually maintenance-free.

**CONDER CLEARSPAN**

CONDER ENGINEERING CO LTD WINNALL WINCHESTER HANTS · TELEPHONE 5095
CONDER ENGINEERING CO (MIDLANDS) LTD PEEL HOUSE BURTON-ON-TRENT · TEL 5411

P.3294

# KENT ELECTRIFICATION

## *Multiple-Unit Express Stock*

### EASTLEIGH PROVIDES 53 FOUR-CAR SETS

FOR the Southern Region Kent Coast electrification due to open on June 15, delivery is now being completed of 53 multiple-unit express sets; these are similar to the prototypes built in 1956 and described in our issue of December 15, 1956, and like them were built at the Eastleigh carriage shops. The units are of four cars, and are similar to the Portsmouth sets in having through vestibuled communication between the units, but with an improved gangway and passage alongside the driver's cab.

As with the prototypes, the units each include two motor coaches and these are powered by two axle-hung traction motors, each of 250 h.p. on the one-hour rating and arranged to balance at 72 m.p.h. on the level.

The acceleration rate has been raised slightly, partly to ensure satisfactory performance on the 1 in 30 gradient of the Folkestone Harbour Branch which will be electrified in the second phase of the present scheme. Layout and general construction are smaller and lighter than before; many of the metal-to-metal contacts which are the principal sources of wear in the rigging have been eliminated.

A number of other changes has also been made to reduce wear and, it is hoped, improve comfort. The bogies are identical with those of the Hastings diesel-electric units, having been fitted with lateral shock absorbers, shear-type rubber auxiliary springs and rubber bonded spherical bearings for the bolster swing hangers. The gangway stems are now rubber mounted and the gangway face plates are lined with anti-friction material to avoid the need for periodical lubrication which previously necessitated the separating of the coaches of units every month. These changes are being made to the older express units as well.

Passenger comfort is also enhanced by the provision of double glass windows and heat and sound insulation for the bodysides, ends, roofs and floors. The capacity of the heaters has also been increased. Each of 43 units consists of two open ends are panelled in green plastics edged with white and with the centre panel between the headrests and armrests finished in dark grey uncut moquette.

The bodyside curtains are of a striped material of golden colour and all interior metal fittings have anodised aluminium natural or similar finish. The floor is covered in black marbled linoleum.

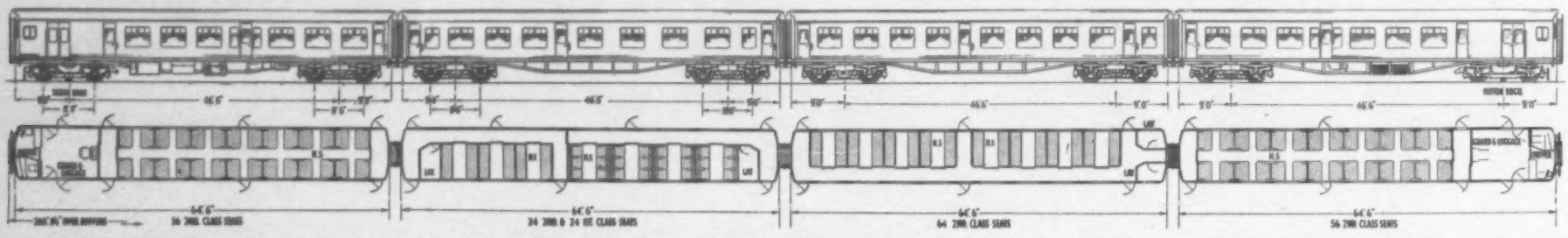
#### Corridor Second

The layout of the corridor second-class vehicle consists of eight second-class compartments seating 64 passengers with side corridor. There are twin lavatories at one end of the coach and end and centre vestibules. The compartment bodysides are finished in sycamore or ash. The bodyside panels below the windows and either side of the windows are of red plastics matt finish with a narrow glossy black panel immediately below the window sill. The ceiling is panelled in light grey matt finish plastics. Partitions above the seat backs are panelled in plastics, pale pink in colour, and the corridor partition in primrose yellow plastics with a glossy white panel above the door-head. The bodyside curtains are green.

The seats, seat backs, armrests and side quarters are trimmed in grey uncut moquette and all metalwork fittings have anodised aluminium natural finish or equivalent. Four shoulder lights, under the control of passengers, are provided in addition to the two roof lights. The corridor and vestibules are finished in plastics throughout, the bodysides and ceilings being panelled in light grey matt and coloured material; luggage racks are finished in silver grey bronze and all other interior metalwork fittings have anodised aluminium natural finish or equivalent. The floors are covered in black marbled linoleum. Four shoulder lights are provided as in the second-class compartments in addition to the two roof lights. The corridor and vestibule at the first-class end of the car are finished in plastics throughout.

#### Buffet Cars

The buffet cars in 10 of the units will be of modern steel construction to the B.R. steam stock 9-ft. profile and their general layout and equipment is much as in those of the earlier units and the Hastings diesel-electric units. The layout of the vehicle is in three main parts: the dining saloon at one end, kitchen and staff quarters in the middle, and the bar and buffet at the other end of the car. A corridor with a service counter from the kitchen connects the saloon and buffet ends. The cars thus cater for the wishes of those who require to be waited upon and also those who prefer the freedom of the standing buffet. The dining saloon seats 17 passengers, and is attractively finished in plastics panelling framed with sycamore. The bodyside panels from the floor to ceiling are of plastics greywood, and the ceiling panels of matt white finish. The saloon end and draught screens at the gangway doorway entrance are finished in stardust brown. The saloon transverse partition at the kitchen end is finished in



Southern Region four-car multiple-unit express set for London to Thanet and Dover electrification; 10 of the 53 sets will have a buffet car in place of the second-class corridor coach

of the coaches, too, is much as in the earlier units but both electrically and mechanically there are several important changes.

#### Modifications

An oil-air-operated camshaft switch group replaces the electro-pneumatic unit switches of the control equipment of the older units, and both axle journal and motor suspension bearings are now of roller type. In order to minimise the risk of current passing through any of these bearings, the return side of both traction and auxiliary circuits is brought to insulated earth brushes bearing directly on the axles. The overall cost of the traction equipment has been substantially reduced as compared with the earlier units and one of the principal contributions to this has been made by providing only one motor generator set and battery per unit instead of one per motor coach.

This has been found possible because of the reliability of these installations in service. Nevertheless it will still be possible to interchange motor coaches if necessary, for instance as a result of accidental damage, at the expense of only fairly simple modifications. The braking layout is also largely to a new design, the components of which motor second brakes, one corridor composite and one corridor second. Then there are 10 buffet-equipped units which have buffet cars in place of the second-class side corridor coach.

#### Motor Second Brake

The layout of the motor second brake passenger accommodation consists of two saloons with a centre transverse glass panelled screen. There are vestibules at either end and centre bodyside doors are also provided in one of the saloons. There are seats for 56 passengers; a centre gangway runs the length of the saloons. The bodysides are finished in plastics panelling with windows framed with sycamore or ash. The bodyside panels below and between the windows are of plastics steel blue matt finish with a narrow glossy black panel immediately below the window sill to take ash-trays and table mountings. The panels above the windows and the ceilings are of light grey matt finish. The saloon ends and centre partition are finished in glossy white plastics.

The seat ends, armrests and seat bases are trimmed in dark grey uncut moquette; seat backs and cushions are faced in the same material relieved with a simple lined pattern. The chair the corridor partition in primrose yellow. The lavatories are panelled in glossy white plastics with ebony marbled tiles as floor covering.

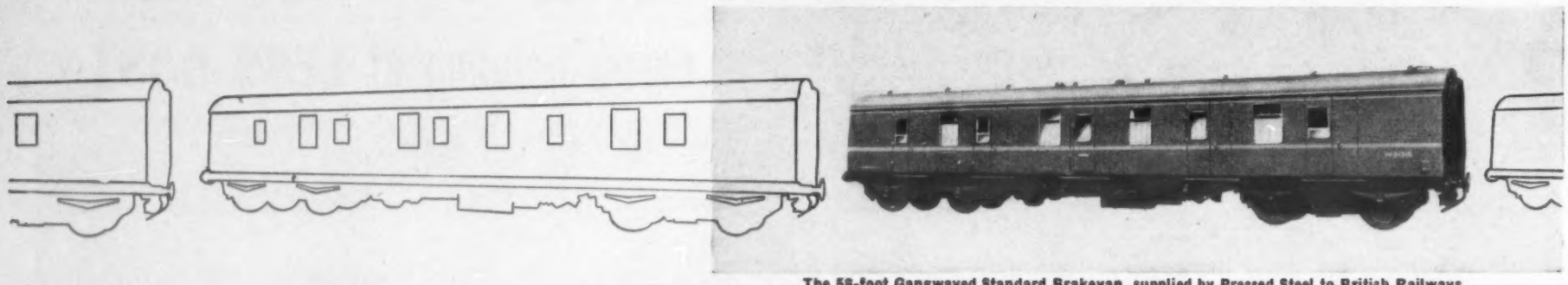
#### Corridor Composite

The layout of the corridor composite vehicle makes provision for four first-class compartments seating 24 passengers and three second-class compartments seating 24 passengers; side corridor, lavatories and vestibules at either end are provided and also a centre vestibule with corridor dividing doors between the first- and second-class accommodation. The first-class compartments have bodysides that are finished in plastics panelling with windows framed in sycamore. The bodyside panel below the window and either side of the window is in green matt finish with a narrow glossy black panel immediately below the window sill. The ceiling is panelled in light grey matt and the partition above the seat back in walnut veneered panelling. The corridor partition is panelled in dove grey with a glossy white plastics panel above the door-head. The seats, seat backs, armrests and side quarters are in charcoal grey with a simple turquoise pattern uncut moquette.

Bodyside curtains are of a striped golden glossy white and the table tops are covered with blue-grey check plastics.

The kitchen, which has steel-framed walls with aluminium panels and cavities insulated with fibreglass, is equipped with an electric cooker with grill and hot closet. A refrigerator and ice-cream conservator is provided. The sink unit is of stainless steel with an electrically heated sterilising unit; storage accommodation is provided as far as possible above and below the table, space being allowed adjacent to the loading doors for the stowage of food hampers, etc. Communication is provided between the kitchen and buffet to facilitate service, and the coffee machine has been housed between the two for convenience. A bottle cooler is provided under the end of the counter in the buffet, remote from the kitchen, and extractor fans are fitted in the roof over the kitchen and also over the coffee machine. The floor of the kitchen, the service area of the buffet and the corridor between the saloon compartment and buffet end of the vehicle, is covered in chequered aluminium plates, and the floor of the circulating area of the buffet end of the coach is covered with black marbled linoleum.

(*Continued on page 9*)

The 58-foot Gangwayed Standard Brakevan, supplied by Pressed Steel to British Railways.

A train 300 miles long

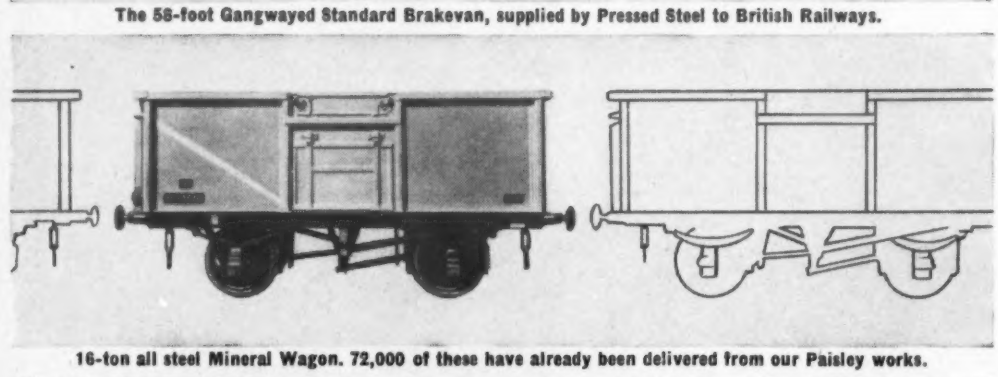
In the last eight years, Pressed Steel have produced enough railway rolling stock to make a train over 300 miles long. Rolling stock of all types, for all gauges, at home and overseas. You see some of these wagons and carriages opposite.

Clearly, Pressed Steel have enormous productivity. Their record shows it. But what the figures do not show is the store of experience built up by our designers and engineers over the last 300 miles of rolling stock. At Pressed Steel we use this experience to make sure that each wagon we produce is a sound engineering job, that it is produced as economically as possible, and in an absolute minimum of time. And we use this experience in intensive research, which will enable us to play our part in developing new and better carriages and wagons in the future.

PRESSED STEEL COMPANY LIMITED

RAILWAY DIVISION, PAISLEY, SCOTLAND.
*London Office:* RAILWAY DIVISION, 47 VICTORIA STREET, LONDON, S.W.1
*Head Office:* COWLEY, OXFORD.

Manufacturers also of motor car bodies, Prestcold refrigeration equipment and pressings of all kinds.



16-ton all steel Mineral Wagon. 72,000 of these have already been delivered from our Paisley works.

21-ton Hopper-type Wagon with drop bottom door for minerals, as used by British Railways.

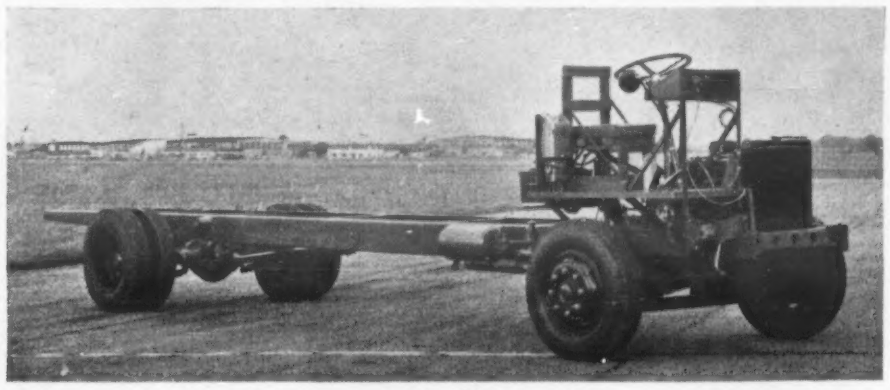
Broad-gauge Covered Wagon type C.R., as used by Indian Railways.

# ROAD VEHICLE INDUSTRY

## *Trend Towards Smaller Wheels*

INCREASING use of smaller-diameter tyres, contributing to easier entry and loading, was a current trend in European commercial vehicle design, the American Society of Automotive Engineers was told recently by Mr. John Alden, commercial vehicle engineer, Vauxhall Motors, Limited, in a paper on European truck features delivered to a Society of Automotive Engineers meeting in Detroit. Tyres of 15-, 16- and 17-in. diameter had not been uncommon on smaller European vehicles, but the trend towards use of 16-in. tyres on heavier vehicles had been accelerated last autumn when Vauxhall introduced 7.50—16 size tyres on a new model Bedford 4-ton lorry of 15,000 lb. g.v.w.

Among the advantages were the lowering of body loading height by 7 in. and cab step height by 4 in., smaller turning circles—an important factor in congested European cities, an in-built gear reduction, increased tyre tread life, due partly to improved ride with decreased unsprung weight, and increased brake pedal reserve due to reduced expansion of small diameter wide brake drums. The same objective of lower heights had brought about a trend towards cab-forward-of-engine design, which allowed driver entrance steps to be positioned lower, ahead of the front wheels, rather than over the front wheels as in a cab-over-engine design. Height was particularly important in short-haul delivery work, during which a driver might enter and leave his cab some 200 times a day.



**The new Douglas DM42 bus chassis**

As in America half the vehicles sold were of less than 6,000 lb. g.v.w. In Europe, engines were being sited lower in the frame, and bonnet and wing lines were being lowered, solely to improve vision, while in America truck bonnet lines were higher (apparently to present "a powerful-looking front-end appearance"). The outstanding engine difference was Europe's far more widespread use, for vehicles of all types and sizes, of diesels, which were almost invariably four-cycle direct-injection types.

### *Suspension Conversion Kit*

CONVERSION kits to enable conventionally sprung vehicles to be fitted with pneumatic suspension systems can now be supplied by the Dunlop Rubber Co., Limited. The kits are designed and engineered to avoid extensive modification and cost, and can be readily fitted. This equipment has already been installed in vehicles from 10 tons down to 30 cwt., and also in trailers. The range can be extended to cover all applications.

### *New Heavy Duty Giant Tyre*

WITH a particular eye upon the requirements for tyres that will stand the higher speeds over the motor roads now under construction, the John Bull Rubber Co., Limited, has announced its new Giant tyre which is available in a range of popular sizes. This has been built to a particularly robust specification and the principal features of its construction are continuous ribs for even wear and high mileage, a staggered pattern to ensure grip, a wide and deep non-skid tread, and a reinforced high-tenacity rayon carcass. As recorded in MODERN TRANSPORT the John Bull company recently modified its trading policy and has considerably expanded its service coverage.

### *Ford Utility Kenebus*

A NEW addition to the Kenex range is a utility p.s.v. conversion of the Thames 15-cwt. van, which will be known as the Kenebus. This vehicle, which carries the full approval of the Ford Motor Co., Limited, is claimed to be the only 15-cwt. p.s.v. to be at present certified as a 12-passenger carrier. To conform with Ministry of Transport requirements for public service vehicles all moving parts subject to vibration are fitted with an adequate nut locking system. Guard rails are fitted below the skirt rail on each side between the wheels and there is a protection rail between the driver and passengers. An extractor vent is fitted in the roof.

### *A Douglas Bus Chassis*

THE range of specialised commercial vehicles produced by Douglas Equipment, Limited, of Cheltenham, has been further enlarged by the addition of the DM42 forward-control bus chassis which is designed basically for 32-seat bodywork. Powered by a Meadows 4DC330 diesel engine it has a wheelbase of 19 ft. 6 in. and an overall length of 25 ft. 9 in. There is an alternative version with chassis extension giving a length of 30 ft. 9 in. The approximate turning circle is 68 ft. Overall width is 7 ft. 9 in. and the top face of the frame, which is of pressed channel section steel, is flat for the whole length of the chassis.

Suspension comprises low-rate semi-elliptic laminated leaf springs front and rear augmented by direct-acting telescopic shock absorbers. The compressor for the air-operated hydraulic brakes is mounted on the engine and feeds a 1,820 cu. in. reservoir. The 24-volt electrical system has a Simms high-output generator. The standard tyre equipment is 10.00—20 14-ply with twin rear wheels. The wheels, which are three-piece type 600T 5.6 in., are eight-stud fixed.

The four-cylinder engine has a compression ratio of 16 to 1 and maximum power of 90 b.h.p. at 2,400 r.p.m. with maximum torque of 230 lb./ft. at 1,350 r.p.m., the ratios of the five-speed gearbox are: first, 6.12 to 1; second, 3.32 to 1; third, 2.38 to 1; fourth, 1.55 to 1; fifth, 1 to 1; and reverse, 4.62 to 1, while the ratio of the rear axle, which is of standard Douglas hypoid reduction type, is 5.83 to 1. The axle is fitted with a dustproof breather. Propeller shafts and universal couplings are Hardy Spicer with needle roller bearings and the vehicle has cam and double roller steering. A chassis was recently shipped to Durban where a 32-seat body is to be mounted.

### *New Industrial Skin Cleanser*

EFFECTIVE skin cleansing has become even more important with the increasing use of synthetic resins in paints, dyes, adhesives, sealing compounds and glass fibres, which stubbornly adhere to the outer layer of the skin. Rozalex, Limited, initiated an extensive research programme and has now produced its industrial cleanser which is of a soft, jelly-like consistency, and is easily applied to the skin—picking up and suspending all grease and grime. No soap or other cleansing substance is required and, unlike liquid cleansers, it does not run off the hands and therefore prevents waste. It can be used in a special Rozalex dispenser which directs the right amount into the palm of the hand, and is obtainable in 7-lb., 14-lb. and 56-lb. tins.

### *Useful Air Call Service*

NOW operating in London, with a range of 25 miles from the central area, is a new type of radio-telephone service operated by the Air Call radio-telephone division of T.A.S. Limited, 36 Wardour Street, W.1. The service is available to cars, vans and lorries, and provides two-way contact between drivers and depots or offices through the Air Call control room and normal telephone service. Cost of the service, including radio licence, is an installation charge of from £5 to £7 10s. and £10 per calendar month per vehicle.

### *Widened Range of Nyloc Nuts*

WIDENING of its standard range of Nyloc self-locking nuts in all the intermediate sizes, up to and including 4-in. thread diameters, has been announced by Simmonds Aerocessories, Limited. Hitherto the largest standard nuts held in stock have been 2-in thread diameters. The new additional sizes will be available in all the standard threads, i.e. British Standard fine, Whitworth, and the unified coarse and selected series. The Nyloc self-locking nut is dimensionally equivalent to a standard hexagon nut with its height increased to incorporate a nylon insert.

### *Single Circuit Battery Chargers*

A COMPACT and simply designed range of single-circuit, high-performance industrial and garage battery chargers has been introduced by Legg (Industries), Limited. The chargers incorporate a high-reactance double-wound transformer, earth tested at 2,000 volts a.c. and a high-voltage full-wave bridge connected selenium metal-type rectifier, giving a high efficiency. Transformer tapping switches are used to adjust the desired charging current, a special tapping method enabling coarse and fine adjustment to be made on low cell values. There are 12 different models with output amperage ranging from 5 to 15 amp. and with capacities of six to 36 cells (connected in series). Connected to a 230-volt supply at 2.5 volts per cell, the maximum output for the smallest model is achieved with an input current of 1.1 amps, and a power consumption of 205 watts; with the same conditions, the largest model has a consumption of 1,170 watts with an input current of 6.5 amps. All models are suitable for charging from three cells up to the maximum, over a current range of 20 per cent to 100 per cent from 2 to 2.5 volts per cell.

### *New Barrel Dispenser*

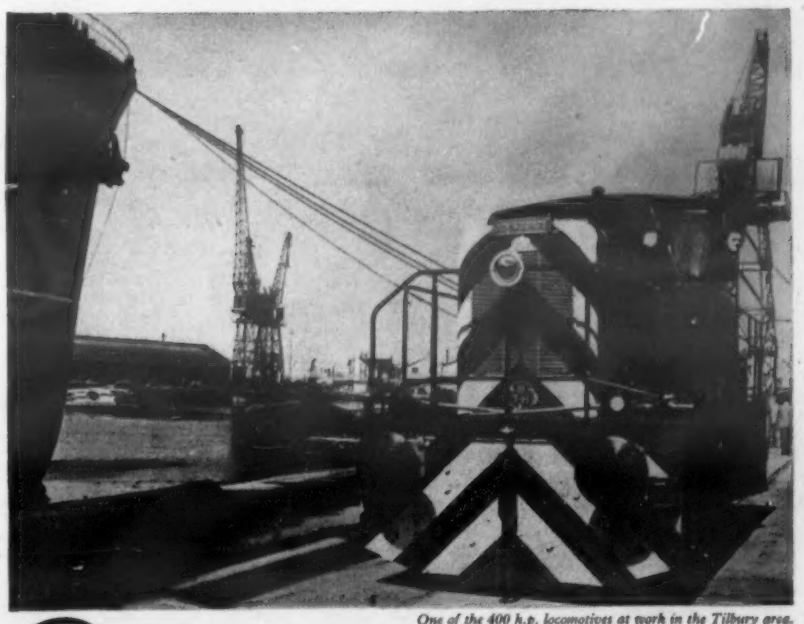
A NEW economic air-operated barrel dispenser, fully automatic in operation and requiring virtually no attention, has been developed by Suba Hydraulics, 142-144 Carshalton Road, Sutton, Surrey. The instrument will deliver liquids without fluctuation or pulsing at the rate of 15 gal. per min., dependent on the type of the vessel and the viscosity of the liquid. Other than the delivery valve, which is manually opened and closed, there are no moving parts and thus deterioration through wear is negligible. There are no vanes, rotors or pockets where contamination could take place and consequently all that is required when changing from one liquid to another is one simple flush out. The air-control valve ensures that the storage vessel is not subjected to more than 5 lb. per sq. in. pressure. In addition, an excess-pressure safety valve is fitted to bleed away excess air pressure in the unlikely event of the air-control valve not functioning. Known as the Suba Model 108 air-operated barrel dispenser, the instrument can be manufactured in stainless steel or other suitable materials when contamination has to be avoided.

The choice of the Passenger Transport Industry

Connolly Leather

CONNOLLY BROS (CURRIERS) LIMITED
CHALTON STREET · EUSTON ROAD · LONDON N.W.1
TELEPHONE: EUSTON 1661-5

AT LONDON'S DOCKS...



*One of the 400 h.p. locomotives at work in the Tilbury area.*

B T-H Electric Traction Equipment

As part of their programme of steam-locomotive replacement, the Port of London Authority has ordered from the Yorkshire Engine Company sixteen diesel-electric shunting locomotives (twelve of 400 h.p. and four of 300 h.p.). BTH are responsible for the electric traction equipment including the diesel-generating sets powered by Rolls-Royce engines.

Six 400 h.p. locomotives of the same type have already proved themselves in service with the P.L.A. for over a year.

BRITISH THOMSON-HOUSTON
THE BRITISH THOMSON-HOUSTON COMPANY LIMITED · RUGBY · ENGLAND
an A.E.I. Company
A5299

*Others may falter . . .*

**COMMERS take it in their stride!**

Rough going . . . tough going . . . going to take the heart
out of other vehicles only spurs the Commer on. Commer power,
strength, and reliability see that the loads get through.
You can with confidence, put your trust in Commer.

*Full details from your local Commer Dealer.*

**COMMER** PETROL OR DIESEL FOR LOADS UP TO 12 TONS

*the toughest name in transport!*

ROOTES PRODUCTS — BUILT STRONGER TO LAST LONGER!

COMMER CARS LTD. LUTON BEDS. EXPORT DIVISION: ROOTES LTD. DEVONSHIRE HOUSE PICCADILLY LONDON W.1

# *NEWS FROM ALL QUARTERS*

### Malton and Whitby Service Dieselised

Diesel train services will be introduced between Malton and Whitby on and from April 6. With the exception of two trains in each direction all the services between Malton and Whitby will be operated by diesel units.

### Londonderry Bus Station

A scheme is under consideration for the conversion of the Great Northern Railway station at Londonderry, should it be closed, into a U.T.A. bus station. The present bus station is at Victoria Market, but the lease is due to expire fairly soon.

### Chelmsford Station Improvement

Train services between London and Chelmsford were electrified in 1957, since when passenger travel to and from Chelmsford has increased even faster than the population of this thriving town. As a consequence the public entrance, ticket office and certain other passenger facilities have become too small as has the accommodation at present available for dealing with parcels. A scheme of improvements will begin towards the end of the year.

### Chester Ring Road

It is hoped to make a start on the Chester inner ring road early next year, solving the traffic congestion problem in this city. The scheme provides for a viaduct motorway 250 yd. in length extending from a point near St. Martins, where a new gate will be built, and proceeding to a roundabout in Upper Northgate Street, where it will regain the surface level. It will span the main railway line and the Shropshire Union Canal.

### Ferry to Isle of Man?

The Isle of Man Tourist Board has had discussions with British Railways, the Mersey Docks and Harbour Board and Liverpool Corporation Passenger Transport Department in an endeavour to improve travel facilities for tourists passing through Liverpool to the Isle of Man. Mr. J. M. Cain, chairman of the Tourist Board, states that the Board feels that the Manx Government must examine the possibility of creating harbour facilities so that a vehicle ferry can be employed on the Isle of Man route.

### Eurofima News

In a report by the international Eurofima organisation before the European Conference of Transport Ministers, the organisation states that its part in the financing of European railway rolling stock purchases in the first two years of its existence, 1957-58, was comparatively negligible. While in these two years the respective railway administrations of member countries ordered a total of more than 40,000 new rail wagons, only 3,217 wagons were paid for by the international body. Over the same period the European stock of diesel locomotives of over 350 h.p. grew by 563 units, only 70 of which were financed by Eurofima, this investment having been raised by a 4¾ per cent loan successfully launched on the Swiss capital market and totalling SFr.30 million (about £2½ million). The 70 locomotives were for Belgium, France, Italy, Yugoslavia, Portugal and Spain.

### Hertford Line Timetable

With the introduction, on March 23, of the second phase of the engineering work on the Hertford (North) line of the Great Northern Line, involving replacement buses between Crews Hill and Hertford, a further timetable pamphlet indicating revised services has been published.

### Stations Closing

As from May 4, Oldham Clegg Street, Park Bridge, Ashton Oldham Road and Dukinfield Central are to be closed for passengers and parcels by the London Midland Region. It has become necessary to withdraw the freight facilities and close the section of line between Little Weighton (exclusive) and Wrangbrook Junction (exclusive) of the former Hull and Barnsley line on and from April 6.

### Rail Passengers at Easter

British Railways carried 453,000 passengers from the London termini in 1,529 long-distance trains on Thursday, Saturday and Easter Monday—nearly 13,000 more passengers than on the corresponding days last Easter. During the holiday period, 15,000 more passengers travelled by rail to Southend and 6,000 more to Blackpool compared with last Easter and 142 special trains for football spectators were run throughout all regions.

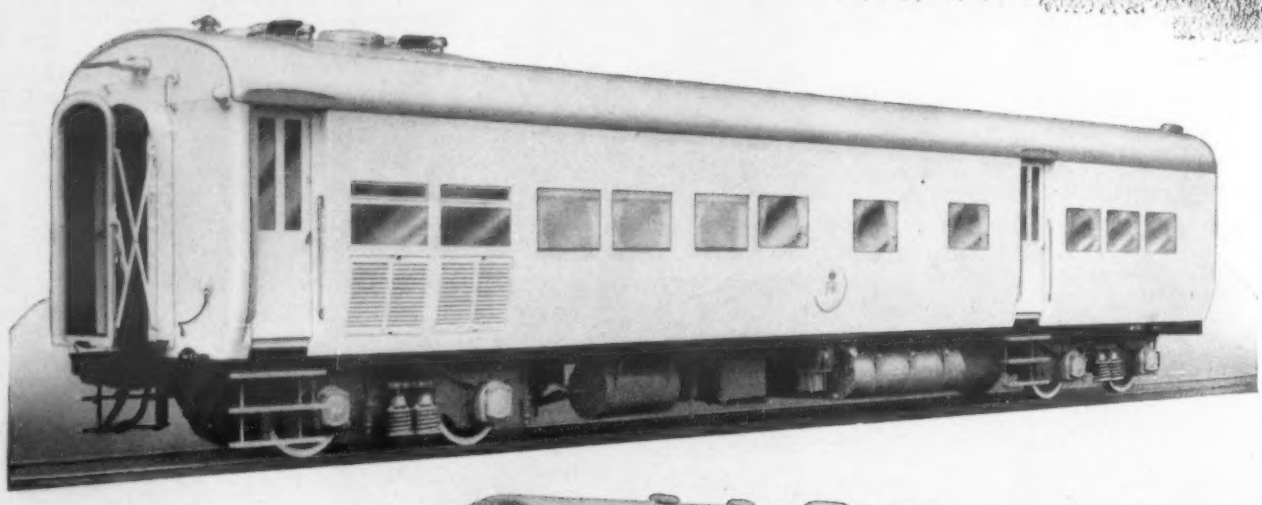
### Next London Trolleybus Change

The next London trolleybus conversion is scheduled for April 15, when routes 555, 677 and 681 will be replaced by RT-type buses. Route 555 will be absorbed in an extension of 170, Wandsworth—Hackney, to run to Leyton Green daily and to Downsell Road, Leyton, at certain times. Route 677, Smithfield—West India Docks, will be replaced by bus 277, Smithfield—Cubitt Town (Stebondale Street), making an additional facility from Hackney and Mile End Station (Underground) to the Isle of Dogs as well as relief to bus 56. Route 581 (Bloomsbury—Woodford) will be absorbed in bus 38A, Victoria—Loughton. Lea Bridge depot will be closed and the buses concerned will work from Leyton garage; Clapton depot has been converted to a bus garage.

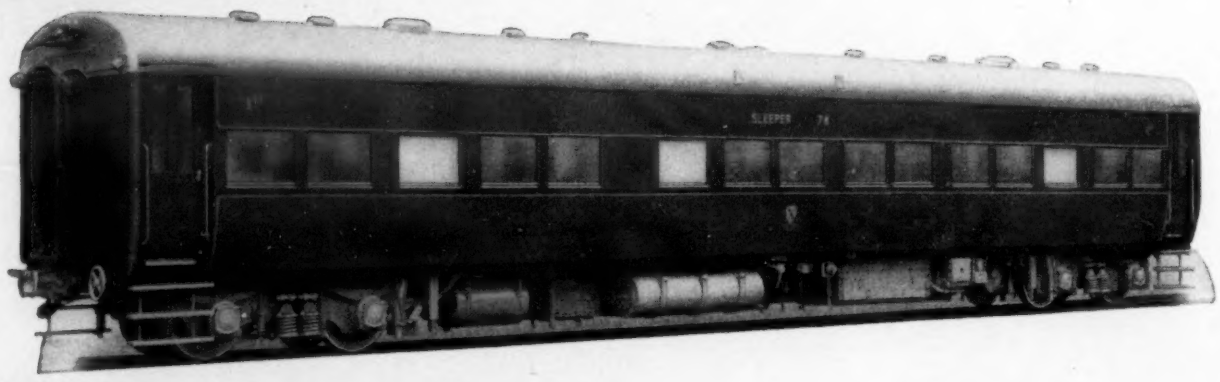
### Three Urban Road Schemes Approved

The Minister of Transport is to make grants of more than £10 million for three urban schemes which will cost in excess of £14 million. The schemes are the duplication of Blackwall Tunnel under the Thames, estimated to cost £7,500,000; the new Park Lane scheme, London, estimated to cost £5,800,000; and the second section of the Birmingham inner ring road which is estimated to cost more than £1 million. Work on the second (southbound) Blackwall Tunnel is expected to start during the autumn and to take about five years to complete. The Park Lane main works are due to commence at about the same time. The section of the Birmingham inner ring authorised (no commencing date is indicated) is that from Upper Priory along the line of Weaman Street to Snow Hill, near its junction with Great Charles Street (see issue of April 6, 1957).

**COACHES FOR RAILWAYS IN AFRICA . . .**



*Special Saloon*
*for use of*
*H.E. THE GOVERNOR*
*Northern Region, Nigeria*



*1st Class Sleeper Car*
*one of 122 coaches*
*comprising nine*
*different types*
*for*
*Nigerian Railways*

THE BIRMINGHAM RAILWAY CARRIAGE & WAGON CO. LTD
Smethwick

TELEPHONE SMETHWICK 1881
TELEGRAMS 'CARRIAGE SMETHWICK'

## COMMERCIAL AVIATION

### London-Moscow Service

### RECONFIRMING BOOKINGS

IT was announced in the House of Commons last week by the Minister of Transport that an exchange of notes bringing into effect the air services agreement between Britain and the Soviet Union had been signed in Moscow on March 24. Mr. Watkinson was hopeful that the London—Moscow air service would be able to start early this summer. The Tu104, which Aeroflot intended to use, would employ agreed operating techniques and procedures designed to minimise the disturbance caused by noise to residents near London Airport, including the use of only one runway for take-off. These operations would be reviewed as soon as sufficient experience had been gained.

**T.C.A. to Use London Airport Central**

From April 24 Trans-Canada Air Lines will handle its transatlantic services at London Airport Central instead of London Airport North. It will be the first scheduled transatlantic operator to make such a transfer and will use Channel 4.

**Traffic Through Geneva**

Scheduled passenger flights using Cointrin Airport, Geneva, totalled 21,737 in 1958, compared with 20,550 in the previous year. This was an increase of 5.8 per cent, whereas the passengers on these flights increased by 7.6 per cent from 655,150 to 704,911. The freight tonnage rose by 7.9 per cent to 9,454 tons, of which 4,193 tons was originating or arriving traffic. This figure was 29.1 per cent better than in the previous year.

**New B.E.A. Aircraft Colour Scheme**

A new and bold scheme of aircraft markings has been devised by British European Airways with the intention of combining greater visual prominence both in the air and on the ground. In the new livery the entire wing surfaces, both top and bottom are to be painted a bright red. The tail is made to stand out vividly by reason of the large red B.E.A. square on the white fin. The fuselage will retain its white roof but will also carry a broad black stripe running from nose to tail the depth of the cabin windows. The new markings have been evolved to satisfy the requirements of an advisory panel including pilots and engineers. The new B.E.A. marking will first be seen on the Comet 4Bs and Vanguards which are due to begin operating next year.

**Demonstrations by Dart Herald**

The Handley Page Dart Herald is leaving Britain on April 10 for the first of a series of overseas sales tours. It will go direct to India, where it will be demonstrated at Delhi, Srinagar, Calcutta, Jorhat and Bangalore. Thereafter the aircraft goes on to Ceylon, where it will be seen at Colombo and to Pakistan for demonstrations at Karachi. On its return flight, the Dart Herald will be displayed on the ground and in the air at Tehran, Ankara and Athens. It is due to arrive back in England on May 19. The captain and first pilot will be Squadron Leader H. G. Hazelden, chief test pilot, Handley Page, Limited, and with him will be Captain D. R. Warren, seconded from British European Airways, as second pilot, and a number of Handley Page engineering, sales and servicing staff.

**Westland's London Heliport**

The heliport which is being built by Westland Aircraft, Limited, on the Thames-side at Battersea, and is now nearing completion, will be opened on April 23 by Mr. John Hay, Joint Parliamentary Secretary, Ministry of Transport. Traffic handling facilities will come into operation on the following day. As the heliport is, initially, beng operated under private licence, operators will be required to give brief prior notice of their intention to use it. Services to be provided will include radio communication and navigational aids, and refuelling, towing and parking facilities for six medium-sized helicopters. Fire-fighting facilities and a rescue launch will also be provided. Two car parks on the heliport site will accommodate up to 20 cars. There will be a central administrative building and facilities will be available on prior notice for customs and immigration clearance of passengers and their baggage and also of freight.

**Revised Reconfirmation Rules**

An extension of rules which have been in effect in the United States and Canada and on all scheduled transatlantic airlines for the past year now requires passengers to reconfirm their return or onward flight space at least 72 hours before departure. If they fail to do so, the airlines will be free to cancel their reservations and make the seat space available to other passengers. The expanded reconfirmation rule, which took effect on April 1, has been developed on an area basis. The "areas" referred to comprise the United Kingdom, Ireland, Continental Europe and Israel as one unit, and Canada and Continental United States (excluding Alaska) as the other. For the general European area the rules will apply only to passengers who are westbound across the North Atlantic; but for Canada and the United States they will apply to all who have return or continuing flight reservations to any points outside the area. The requirement is not applicable to a passenger whose stay in the area is for less than the three-day period.

**B.E.A. Traffic Rising**

Forward bookings for the summer were excellent, Lord Douglas, chairman of British European Airways, reported in his latest message to the staff. After commenting on the setbacks suffered due to last year's trade recession, followed by a winter in which 1,800 B.E.A. services were cancelled due to fog and bad weather, Lord Douglas said that traffic results for February showed a continuation of the more favourable trend which had shown itself in recent months—traffic increased by 13 per cent over February of last year, in spite of the widespread disruption of services by fog. Preliminary indications were that the March traffic would be even better than that in February. There were also good prospects that the recovery in the rate of traffic growth would continue into the new financial year which began on April 1. Forward bookings for the summer were excellent. The short-fall in traffic last summer, caused by the trade recession, resulted in a decline in load factors because B.E.A. was offering 16 per cent more capacity than in the previous year. This year it would be producing only slightly more capacity than in 1958 so that, if it did, indeed, have a healthy expansion of traffic, its load factors should begin to rise again towards their previous high level.

# GOLDEN JUBILEE OF RAILWAY STUDENTS

Mr. A. B. B. VALENTINE, B.A., M.Inst.T.

• • • • • •

This weekend sees the celebration in London of the Golden Jubilee of the Railway Students' Association, culminating in a reception and dinner on Monday evening when Mr. Alexander Balmain Bruce Valentine, member of the British Transport Commission, who is this year's president, will receive the guests and preside at the dinner. After 26 years in the service of London Transport he was appointed a full-time member of the Commission in 1954. He was born in December, 1899, and educated at Highgate School and Oxford, where he was a scholar of Worcester College and took an Honours Degree in Classics in 1922. In March, 1928, after six years with the British Commercial Gas Association as deputy editor of publications and publicity, he joined the Underground group of companies and was engaged for a short time on publicity work, until he became an assistant in the office of the late Mr. Frank Pick, then managing director. He was Mr. Pick's personal assistant when the London Passenger Transport Board was formed and remained in that position until 1936. He was fares officer of the Board from 1936 to 1939, commercial officer from 1939 to 1943 and chief supplies officer from 1943 to the end of 1945. In January, 1946, he was appointed chief commercial officer, covering both the traffic side and supplies, and on the retirement of Mr. Evan Evans from the post of operating manager (railways) later in that year he assumed that appointment in addition to his commercial duties. During 1947 he was a member of the Railway Executive Committee in succession to Lord Ashfield, who had been appointed to the B.T.C. When the London Transport Executive was set up in 1948 he was appointed a full-time member of that body with responsibility for operating and commercial matters. He became a member of the London Plan Working Party, set up by the British Transport Commission; its report, published in 1949, recommended extensive works of new tube construction and railway electrification in the London area. Mr. Valentine has been a member of the Coastal Shipping Advisory Committee since 1958, and a member of the Channel Tunnel Study Group since 1957. After service on the council of the Institute of Transport he was elected a vice-president in 1948 and was president in 1951-52. In that capacity he made a notable journey to Australia to take part in the Institute's activities there. He was awarded the Road Transport (Passenger) Medal of the Institute in 1945.

## IN PARLIAMENT

### More G.V. Licences Suspended

### COMPULSORY ARBITRATION

THE Joint Parliamentary Secretary to the Ministry of Transport, MR. G. R. H. NUGENT, told MR. ERNEST DAVIES that during the 12 months ended September 30, 1958, 12 licences covering 16 vehicles were revoked and 18 covering 36 vehicles were suspended. During the previous year three licences covering three vehicles were revoked and three covering five vehicles were suspended.

**Priority at Roundabouts**

The Departmental Committee on Road Safety is making a further examination of the problem of priority among vehicles entering a roundabout in the light of all known facts, including the practice and experience in other countries, said MR. G. R. H. NUGENT. Until that study was complete the advice the Committee had given so far stood, namely, that it was not in the interests of road safety to prescribe a priority rule at roundabouts. He did not think that the rule, "give way to traffic on your right," was altogether satisfactory.

**Pollution from Exhaust Fumes**

MR. H. NICHOLLS, Parliamentary Secretary, Ministry of Works, said that research on combustion in diesel and petrol engines with a view to reduction in the emission of exhaust fumes is being carried out by the Motor Industry Research Association and the British Internal Combustion Engine Research Association, each of which is supported by the Department of Scientific and Industrial Research. Results of this and other work show that the greater part of the smoke from such engines can be prevented by proper adjustment, running and maintenance. The Warren Spring Laboratory of the Department of Scientific and Industrial Research has tested a catalytic device which reduces the pollution from petrol engine fumes effectively. MR. ERNEST DAVIES remarked pungently that there was no evidence that any action had been taken to reduce this menace on the roads.

**Compulsory Arbitration in Industry**

A Government amendment to the Wages Councils Bill, which now awaits the committee stage in the Commons, is intended to meet trade union objections to the lapsing of the Industrial Disputes Order. It follows discussions between the Ministry of Labour and representatives of employers, trade unions, the nationalised industries and local authority interests. These bodies are prepared to accept the continuance of compulsory arbitration in the narrow field of issues, as distinct from disputes. Issues will, in future, be known as claims.

Under the Industrial Disputes Order, only trade unions could report issues from the workers' side. Now any organisation of workers will be able to report a claim if it qualifies as a party to an agreement or award which has settled recognised terms, or conditions, in the industry. Claims will be referred to the Industrial Court. Unless satisfied that the terms or conditions which an employer is observing are not less favourable than the recognised terms, or conditions, the court will make an award requiring him to observe them. This will have effect as an implied term of contract. The new clause will not apply to workers whose wages are fixed by statutory machinery because enforcement there is already provided for.

★

## *Forthcoming Events*

**April 6.**—Institute of Transport (Metropolitan). Paper by Mr. L. W. Lane, "The Place of Public Transport in Town Planning." At 80 Portland Place, W.1. 6 p.m.
Institute of Transport (Darlington). Paper by Mr. B. T. Pratt. At United House, Grange Road, Darlington. 7 p.m.
Institute of Transport (Sheffield). Annual general meeting. At Royal Victoria Hotel, Sheffield. 7.30 p.m.
Permanent Way Institution (Leeds and Bradford). Paper by Mr. G. G. Fisher, "Railway Weed Control." At B.R. Social and Recreational Club, Leeds City Station. 7 p.m.
**April 7.**—Institute of Transport (Irish). Paper by Mr. K. Brady, "Characteristics of Urban Bus Organisation." At C.I.E. Club, Earl Place, Dublin. 8.15 p.m.
Institute of Road Transport Engineers (Eastern). Annual general meeting. At Golden Hind Hotel, Cambridge. 7 p.m.
Institute of Transport (Midland). Annual general meeting. At Exchange and Engineering Centre, Birmingham. 6.30 p.m.
**April 8.**—Permanent Way Institution. Paper by Herr A. Bethaven, "Drainage and Stabilisation of Track, Cuttings and Embankments on the German Federal Railways." At 222 Marylebone Road, N.W.1. 6.30 p.m.
Institute of Transport (Southern). Annual general meeting. At Harbour Board Offices, Town Quay, Southampton. 5.45 p.m.
Railway Correspondence and Travel Society (Lancs and N.W.). Paper by Mr. J. Clay, "The Locomotives of the L.N.W.R. Whale-Bowen Cooke Era." At Douglas Hotel, Corporation Street, Manchester. 7.15 p.m.
**April 9.**—Institution of Railway Signal Engineers. Annual general meeting. At Federation of British Industries, 21 Tothill Street, S.W.1. 6.30 for 7 p.m.
Institute of Road Transport Engineers (Western). Annual general meeting. At The Vineyard, Colerne, Wilts. 6.45 p.m.
**April 10.**—Institute of Transport (Northern). Annual general meeting. At Royal Station Hotel, Newcastle upon Tyne. 7 p.m.
B.R. (Western Region) London Lecture and Debating Society. Debate with North Eastern Region Federation of Lecture and Debating Societies. At H.Q. Staff Dining Club, Bishops Bridge Road, W.2. 5.45 p.m.
Stephenson Locomotive Society (Scottish). Paper by Mr. A. F. Cook, "Some Thoughts on the Products of Swindon." At 25 Charlotte Square, Edinburgh. 7 p.m.
**April 11.**—Institute of Transport (Bournemouth-Poole). Annual luncheon. At 12.45 for 1.15 p.m.
Permanent Way Institution (Leeds and Bradford). Visit of Irish Section to Leeds.

★

## KENT ELECTRIC TRAINS

(*Continued from page 6*)

The lighting in the buffet and saloon is by roof lamps with reflectors, and warmth is provided by bodyside convector heaters. Two bodyside doors are fitted in the buffet; these can be used as exits by the passengers in the case of emergency. Double swing self-closing doors and draught screens are fitted at each end of the car. A water tank of 120-gal. capacity is carried on each underframe for catering purposes, with an electrically operated compressor suspended in a resiliently mounted case adjacent to it, for raising the water to the service taps through pipes at a low pressure varying from 5-12 lb. per sq. in. No roof water tanks are needed. The condensing units for the refrigerator, ice-cream conservator and bottle cooler, are also carried on the underframe. The motor-generator set supplying and controlling the cooking load, is also mounted on the underframe; the equipment case contains contactors and relays for the electrical appliances, which are fed by cables carried in conduits along the underframe.

# *A great BRITISH tyre - with a great BRITISH name!*

## *Cut your cost per mile with the*

# JOHN BULL

TRADE MARK

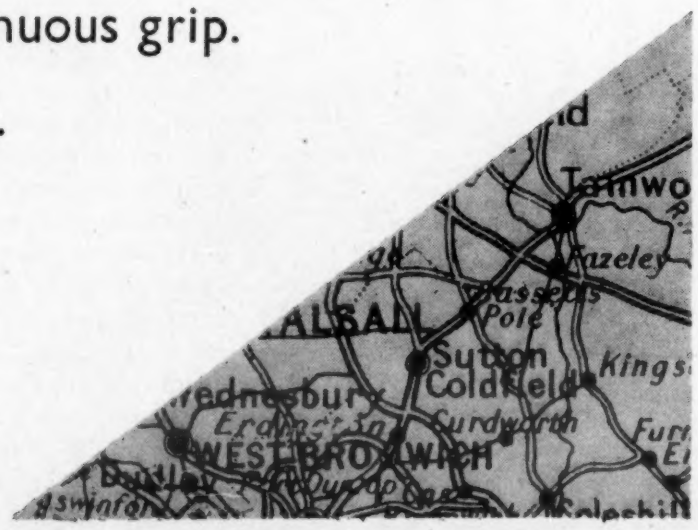
★ Continuous ribs for even wear and high mileage.

★ Staggered pattern for continuous grip.

★ Wide, deep, non-skid tread.

★ Reinforced rayon carcass.

★ Cool running.




**JOHN BULL RUBBER CO. LTD., LEICESTER**

JOHN BULL
NEW
GIANT
LEICESTER
Groby
Ibstock
Twycross
Market Bosworth
Thurnby
Warbotough
Wigston Magna
Great Glen
Atherstone
Earl Shilton
Bilby
Harrow Inn
Hinckley
Nuneaton
Smockington

## LETTERS TO THE EDITOR

# Co-ordination of Transport

*The Editor is always glad to receive letters from readers on subjects germane to the transport industry, but these should be written as concisely as possible. The opinions expressed therein must not, however, be regarded as having editorial endorsement. Where correspondents desire to use a nom-de-plume it is essential that the Editor should be informed of the name and full address of the writer as indication of good faith.*

SIR,—The report of the working committee on co-ordination of transport which sat in Bangkok from November 25 to December 2, 1958, in pursuance of the recommendation made by the Inland Transport Committee of ECAFE is a triumph for three British economists—Messrs. A. M. Milne, G. J. Ponsonby and J. R. Sargent—who have shaped economic thinking on transport matters in the recent past. The conference concluded that transport charges should be based on the "cost of service principle," and not on the "value of service principle." It was only by basing charges for services on the cost of providing them that the true co-ordination of the different forms of transport could be achieved.

The desirability of basing charges on cost had been urged in the late Mr. Milne's book *The Economics of Inland Transport* which first appeared in 1955. It had also been urged in the numerous writings of Mr. Ponsonby but especially in his article *Towards a New Railway Charges Policy* which appeared in the *Journal* of the Institute of Transport in September, 1954. Finally the principle was enunciated by Mr. J. R. Sargent in his book *British Transport Policy* which appeared in 1958.

### Place of Economics

The acceptance of this principle by practical transport men is evidence of the contribution of economics to the science of transport. In this connection I am reminded of the fact that Sir Reginald Wilson in his presidential address delivered to the Institute of Transport on October 14, 1957, said:

> "We are still an exceedingly long way from achieving a proper marriage between the academic brain and the practical man. The trained economist is not offered a broad experience in the actual working of transport—and without it he is a dangerous guide—and the practical man acquires no proper understanding of the object and methods of economics. They do these things better in the United States. But in any case the 'dismal science' is not the beginning and end to the development of a proper outlook on transport or of a proper man."

On reading Sir Reginald's address in the Institute's *Journal*, I remember writing to MODERN TRANSPORT stating, with respect, that I disagreed with his view. Although I had been a practical transport man for several years, I had derived great benefit from the writings of Messrs. Milne, Ponsonby, Walker and Pool. I am therefore very gratified that the ECAFE conference has accepted the view that the difference in rates and fares for a particular task as between the different forms of transport should afford an index as to the comparative costs of each.

### Artificial Restriction Harmful

In the past we find that many of the Asian countries have followed in the name of co-ordination the policy of artificially restricting one form of transport in order to bolster up another. For example we find long-distance carriage by road over a specified distance of a variety of commodities being prohibited by law. Ostensibly, the object of this restriction (introduced under cover of a licensing system) was to protect the railways from "unfair" competition. But the question was never considered whether, from the national point of view, it was desirable that the railways should divest themselves of all traffic at present carried at a loss, and so much of which would be more economically carried by road.

For, as Mr. Ponsonby points out: "Once the incubus of carrying certain traffics at a loss were removed, many other traffics might be charged (on a cost basis) at much less than at present. Such traffics would be thereby encouraged and in the long run possibly expand considerably. Thus the railways, by going over to charging more nearly to their real costs of carriage, would come to carry a larger and larger proportion of the kind of traffic which they are best qualified to carry, and less and less of the remainder. Thereby the interests of co-ordination (functional specialisation) would be truly served."

The working party realised that the objective of any transport policy for the countries of the region was primarily to expand transport capacity as quickly as possible. Transport had to be made an instrument for furthering economic development. With this object in view, the working committee has recommended "a variety of measures . . . in order to evolve a comprehensive and effective policy of co-ordinated development of transport in the countries of the ECAFE region."

As part of the machinery of co-ordination the working party has recommended "the establishment where possible of a single independent regularity authority controlling all forms of inland transport." The authority is to be given power to authorise the expansion, curtailment and abandonment of services as well as complete control over rates and fares—in order to ensure that these are such as generally to reflect costs.

The recommendations of the ECAFE conference have already met with general acceptance in influential circles in Ceylon, and it is quite likely that they will shape future Government policy in this sphere. If accepted, the principles enunciated by the ECAFE committee will enable us to do away, once and for all, with the antiquated principle of artificially allocating traffic among the different forms of transport.—Yours faithfully,

F. D. C. WIJESINGHE.

*The Planning Secretariat,*
*Colombo, Ceylon.*

## *Longmoor Military Railway*

SIR,—I was very interested to read the article on the Longmoor Military Railway which you published in your issue of March 7, but should like to draw attention to one small inaccuracy which appeared therein.

You mention that the new 54 lever frame was installed in 1944 to deal with the vastly increased wartime traffic but in fact this new frame was installed by the Westinghouse Brake and Signal Co., Limited, in 1950-51 under the direction of the instructor (operating) Major W. Ratledge. This replaced a frame of the Continental pattern containing about 36 levers which I assume was installed in 1944.—Yours faithfully,

F. GLADWIN.

30 *Woodlands Road,*
*Romford, Essex.*

## *Reversing London Bus Stairs*

SIR,—The photograph and description in your issue of March 21 showing a London RTL bus of which the entrance and staircase have been reversed to the opposite hand, so as to render it suitable for sale to overseas operators, recalls the fact that this is by no means the first time this problem has been tackled. The accompanying photograph was taken in August, 1955, at Skopje, in the extreme south of Yugoslavia, and shows a conversion made by the local city bus operator (Graaski Soobrakaj) to about 24 ex-London buses of the STL type which it had purchased. The one illustrated is STL1296. The platforms and staircases were left undisturbed, but, in order to render these buses suitable for the right-hand rule-of-the road, the open entrance at the rear of the left-hand side of the body was closed in, and, instead, an

**Ex-London Transport STL1296 in service at Skopje**

opening was cut in the left-hand half of the rear frame of the body, extending from the face of the lowest staircase riser, out to the (Continental) offside corner. Although thus not giving direct access on to the pavement, it did, at a small fraction of the cost of a complete rebuild, allow passengers to board and alight without emerging beyond the width of the bus into the path of overtaking traffic. Even such small items as the handrails and used ticket box were thus able to remain undisturbed, but an additional amenity was provided in the form of a transverse sliding door, mounted, with its extra pillars and runners, outside the existing rear of the bus.

### Fleets at Skopje and Novi Sad

Buses thus converted comprised, at the time of my visit, about three-quarters of the urban fleet at Skopje, but there were also a few other London STLs which had been converted to single-deckers, and a few modern French single-deckers. The town of Novi Sad, in north-eastern Yugoslavia, was also operating a fleet of similarly converted ex-London STL buses, though without the sliding door. In view of the close dimensional similarity between the STL and the RT or RTL types there would seem to be no reason why the latter could not be converted in the same manner, and this might appear financially more attractive to any potential overseas purchasers which were reluctant to spend a lot of money on the major rebuild required for the complete reversal of the staircase, involving also, as it must, such major components as the battery crate and the upper-deck floor. Moreover, should the door be required, a sliding door can very easily be fitted to the rear, whereas in the conventional side position the rear wheelarch prevents the use of a simple sliding door, and the jacknife folding door has to be used instead, with its attendant complications.

The complete reversal of the staircase and the entire rear end has also been tried, however, in Yugoslavia on an ex-London bus, no less than six years ago. The town of Sarajevo purchased one Weymann-bodied Guy Arab (G36) in 1952, followed by 10 more in 1953. A few of them were for use on an outer suburban route to the village of Ilidza, and the entrances were not in any way altered, passengers having to board and alight in the middle of the road. But the remainder was for use on city services in the inner area, where kerb-side loading was considered essential, and their rear ends were completely rebuilt and reversed in exactly the same manner as has now been effected on RTL3.—Yours faithfully,

J. C. GILLHAM.

209 *Gunnersbury Park,*
*Ealing, W.5.*

## TRANSPORT IN SOUTH AFRICA

(*Continued from page* 3)

been practically eliminated in the new signal installations provided in the Frankfurt area of the German Federal Railways and on the underground railways of the London Transport Executive. Here automation has been very far advanced.

It is quite obvious that in most countries of Western Europe that steam is steadily being replaced by either electrification or diesel traction. In West Germany hydraulic transmission in diesel traction was rapidly gaining ground and "even the British Railways have placed orders for heavy diesel-hydraulic locomotives of 2,000 h.p." Improvements in work technique and equipment that had taken place since his previous visit to Europe four years ago he found most impressive.

...operators are enthusiastic!

Good looks and agile performance put Thames 5/7 cwt. vans top of their class—carrying the lighter loads at far lower cost.

Ultra-modern styling, that automatically associates your name with efficiency . . . extra load capacity, and every inch 'usable'—plus full width double rear doors, low floor level, optional side-loading door . . . car-type controls, panoramic windscreen, foam-rubber seating . . . zestful, flexible 1703 c.c. power with easiest engine and transmission access—*every* feature of the brilliant new Thames 10/12 and 15 cwts. is designed to make operators enthusiastic! New Thames deliver more—faster and cheaper! And they're now available at—**NEW REDUCED PRICES**! It's a 'sales up, prices down' success story! New prices are: **10/12 cwt. £536.16.4, 15 cwt. £548.18.1** *(in primer, tax paid)*. See your Ford Dealer. Make the years-ahead choice *today*—Thames!

**THAMES VANS BY FORD**

BRITAIN'S BIGGEST SELLERS—THAMES VANS AND TRUCKS

# BRITISH RAILWAYS AND THE TRADER

## *Requirements and Their Fulfilment*

### 2—RELIABILITY: COSTS: STREAMLINING*

***We now publish the second part of an abstract of Mr. E. G. Whitaker's paper on the requirements of railway customers, recently delivered to the British Railways (London Midland Region) Lecture and Debating Society. The author is transport adviser, Unilever, Limited. The next part will deal with a reply by Mr. E. W. Arkle, L.M. director of Traffic Services***

FURTHER, there may be cases where even if he could be convinced that there would be no such risk, he may be unwilling to dispense with the services of a haulier who has given excellent facilities over a period during which the railways were unable or unwilling to do so. A further point which may influence the transport manager is that the effect—it may be real hardship—on the haulier and on his employees of the withdrawal of traffic is so much more clearly evident in the case of road haulage than with rail.

Then there is the size or status of the transport department arising from the carriage of goods in the trader's own vehicles. In the development of a C-licensed fleet an important transport department may have been created, and the transfer of a substantial proportion of the traffic to rail may be resisted by the transport manager because this might undermine the structure of his organisation and be prejudicial to his own interests.

#### Advantages by Rail

Whilst I have noted at some length the attractions of road transport, I do not wish to imply that they are all on that side. The railways have a number of advantages, particularly for private siding traffic. The loading and unloading of wagons at private sidings can usually be planned to better advantage throughout the working day than the loading or unloading of road vehicles. It is generally cheaper to load or unload rail vehicles than road vehicles at night. The "free period" under rail demurrage arrangements provides a facility which is attractive to the customer, albeit that the demurrage charges incurred when the free period expires have been increased substantially of late, to which I do not object. There is the further point that more reliance can be placed on rail services during bad weather, such as fog, snow, etc., which may bring road transport to a standstill.

Where such advantages apply it may be possible for traffic to be secured to rail at rates which are equal to the road charges; but it is often not enough for the railways to offer the same rate as the road haulier. There must be some real inducement and it is only to the extent that the railways can offer such inducement that large flows of traffic will be attracted from their competitors.

#### Reliability

Then the railways must improve their freight services. The first need, I suggest, is to concentrate on regularity and reliability, which are often more important than speed. For example, a guaranteed 48-hour service is suitable for many of our products, and if for these the railways can offer a lower rate than road transport, which speaking generally, guarantees a 24-hour service, this would attract more traffic. In this connection, it is useless to argue that 90 per cent of the forwardings by rail obtain a two-day service, when some of the remainder take three, four, five or six days (even if others are received in one day!), because the programme of stockholding must be conditioned by the longest transit time. The urgent necessity for limiting stocks (including, of course, the quantity in the pipeline) to the minimum, and so releasing capital which would otherwise be tied up, has increased in recent years.

I doubt if the railways are doing as much as they should in market research or consumer research. Whilst I understand these techniques have been practised to a considerable degree for passenger traffic, it does seem that they should be employed far more extensively than they are for freight traffic. When my companies are considering the possible launching of a new product they spend much time on consumer research to find out—as well as they can—what the consumer reaction to it would be. If such inquiries were made by the railways of their customers respecting some of the new services which have been instituted, would this not have ensured greater success than has so far been achieved?

The railways, I suggest, should study very closely those fields where, by way of costs and/or service, they are likely to have an advantage over other forms of transport and should lose no effort in exploiting these favourable circumstances.

#### C-Licensed Vehicles

Reference to C-licensed vehicles has been made in all the Commission's annual reports, except those for 1950 and 1953. I would quote from only one—that for 1955:

> "Apart from the effects of the locomotivemen's strike and the uncertain transit times referred to, the main reason for the fall in railway merchandise carryings was probably the increasing competition from C-licensed road haulage vehicles. The total issue of C-licences, which require no proof of need, has increased by over 180 per cent since 1938, and it is believed that about 180,000 of these, vehicles of 2½ tons unladen weight and over, are running empty or less than half loaded for about half the time they are on the road."

Whilst I am not going to challenge the facts as stated, I think the inference that can readily be drawn from this is that 180,000 C-licensed vehicles could be operated more economically. Obviously this may be so for some operations—and even in these convenience may outweigh all other considerations—but I am sure that in by far the majority of cases it is not so. The total of 180,000 includes a large number of vehicles which are engaged in wholesale deliveries to retailers probably within a radius of 50 miles where there can be no possibility of return traffic, and in those circumstances the vehicles cannot do otherwise than run empty, or less than half loaded, for about half the time they are on the road.

There is considerable criticism that traders operating C-licensed vehicles do not know the costs of these operations, and here again the inference is that if the traders entrusted the work to public transport their costs would be reduced and/or the service would be more efficient. I very much doubt whether, in any case, public transport could improve on the efficiency of the service.

Regarding costs, I can say that in my own organisation the economics are thoroughly investigated before capital expenditure on C-licensed vehicles is authorised. It is most important to us that we do not invest in transport money which could be more profitably utilised in production and marketing, and—to ensure that the cost basis is comparable with the charges raised by the providers of transport—the parent board insist that a service charge is included for the capital to be employed, which is in excess of what, for example, the Commission has to pay for the capital it employs.

Of course, there may be cases where costs are not so accurately assessed, but this poses the question as to what the railways themselves are doing about it. You will know in a general way—and particularly through British Road Services—that some traders have been persuaded to give up their transport fleets and entrust the work to public transport on a contract basis. I know from experience that to achieve this a considerable amount of time, and a great deal of trouble, has been expended to prove to the trader that the new arrangements would be more profitable to him.

Assuming it were true that a fair proportion of the traffic conveyed in C-licensed vehicles could be carried successfully by rail at a lower cost, *and at a lower charge*, why do the railways not secure more of it? Do the railways make adequate efforts to draw the trader's attention to the possibility of reducing his costs by discontinuing the use of C-licensed vehicles in such cases?

#### A Compact Rail System

It seems to me that road transport will continue to expand, and that for this reason railway activities will have to be seriously curtailed. The need for the latter has now been acknowledged in railway and Government circles. I have previously quoted Sir Brian Robertson's remarks. Mr. A. B. B. Valentine (a member of the Commission), has reinforced these in his recent presidential address to the Railway Students' Association, and so has Mr. Whitworth, when speaking to the Metropolitan Section of the Institute of Transport. The Minister of Transport, writing to the chairman of the B.T.C. on October 30 last said:

> "The British Transport Commission re-states its view that a modern railway system is essential to our industrial future. I do not dissent, although as you recognise, it will have to be a more compact and efficient system than it is today."

I have not seen it mentioned, however, that with a reduced system and a narrower field of operatons, consideration ought to be given to reorganisation of capital (such as was necessary in a number of industries, between the wars) to assist in enabling the railways to pay their way. I appreciate that the Commission cannot do this themselves and that an amendment to the Transport Act, 1947, would be necessary, but they might well consider making representations to the Minister on the subject.

#### Results of Streamlining

One welcomes, of course, the modernisation and streamlining of the railways, and the work certainly appears to be gathering momentum. But what interests me as a customer—and indeed as a potentially larger customer—is in what directions, and at what time, the railways themselves consider they will be able the most effectively to meet growing road competition. I would like much more information as to the kind of services, and over which routes, etc., the modernised, streamlined railways will be competitive, and most attractive to the user, and when.

It is appreciated that the railways will be handicapped in competing on charges in the period during which they are being modernised and streamlined, and while their costs continue to be high. If, however, I could have a considered and reliable forecast of the effective competitive position they will reach in, say, five or ten years, this would enable plans to be made to ensure that we shall be in the best position to take advantage of the new situation when it arises. It may also justify in the meantime the retention to rail of traffic which might otherwise be transferred to road.

#### Private Siding Policy

Although over a number of years a considerable volume of my firm's traffic has been transferred to road, we have so far retained our railway sidings, notwithstanding that in some cases there has been considerable pressure to have them taken up. At one or two new factories we have provided railway sidings, although under present conditions there is little inducement to forward or receive traffic over them. In the case of one new warehouse equipped with a siding connection hardly an ounce of traffic has passed over the siding in four or five years.

One of our associated companies has been re-equipped with modern depots, and wherever possible sites which could be rail-connected have been selected. I am bound to say that the strenuous efforts made to obtain rail connections have not yet been fully vindicated by the attractions offered by rail transport. As you will understand from our attitude in these cases, we have faith that the railways can perform a vital function in a more limited field than at present, but it is time that we had more reliable information of what the railways will be able to offer, otherwise, to say the least, our faith will be dimmed.

#### Improvements

Dealing with developments to date, I must, however, acknowledge that there are many indications that the railways are taking advantage of the charging freedoms they were granted under the 1953 Act. We ourselves have instances of contracts entered into recently which I am sure will prove mutually beneficial in the long run, and others are under consideration, and one can certainly applaud the measures the railways have taken and are taking to attract traffic.

The railways and my company together have developed the system of palletised unit loads, and we are greatly encouraged that the railways have gone so far with us. It is still a fact, however, that it is more expensive to load to rail than to road, and this is another circumstance illustrative of the point I made earlier that it may be necessary to reduce rail rates below the road charges to attract traffic. A further point is that for our commodi-

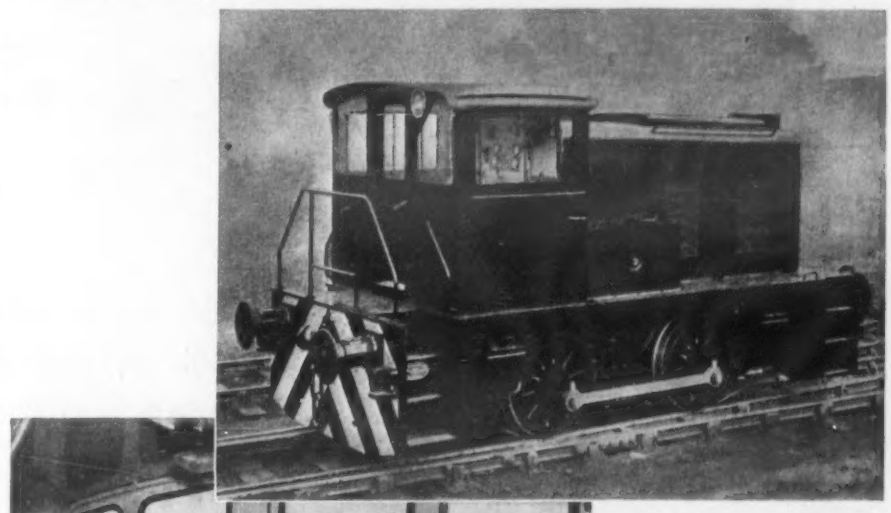
(*Continued on page* 14)

* No. 1 appeared March 21.

**Some new diesels**

**fitted with** WESTINGHOUSE **BRAKE EQUIPMENT**

*One of 15 for service on the Scottish Region, British Railways.* 204 b.h.p. diesel mechanical locomotives built by Andrew Barclay Sons & Co. Ltd., Kilmarnock, fitted with Westinghouse vacuum controlled straight air brake.



Built by the Yorkshire Engine Co. Ltd., Sheffield, in collaboration with Rolls-Royce Ltd., for shunting purposes in light industrial plants, these 170-ton diesel hydraulic locomotives are fitted with Westinghouse straight air brakes and pneumatic control for reversing gear.

*Brakes made in England by:—*

**Westinghouse Brake and Signal Co. Ltd.,** 82 York Way, Kings Cross, London, N.1

*India*—**Saxby & Farmer (India) Private Ltd., Calcutta**
*Australia*—**Westinghouse Brake (Australasia) Pty. Ltd., Concord West, N.S.W.**
*South Africa*—**Westinghouse Brake & Signal Co. S.A. (Pty.) Ltd., Johannesburg**
*Agents:—Bellamy & Lambie, Johannesburg*

**SILVER ROADWAYS LTD.**

*Reliable Trunk Services to all Parts*

**BRISTOL** 8 The Grove, Bristol 1 *BRISTOL 22315*
**BIRMINGHAM** 323 High St., West Bromwich, Staffs. *WEST BROMWICH 2801*
**LLANELLY** Morfa Works, Llanelly *LLANELLY 4302*
**CARDIFF** 10 Dumfries Place *CARDIFF 21631*
**SWANSEA** Exchange Buildings *SWANSEA 54171/5*
**TAVISTOCK** Harford Bridge *TAVISTOCK 2374*
**GLASGOW** 12 Dixon Street, C.2 *CITY 3381*
**LIVERPOOL** 11 Old Hall Street, Liverpool, 3 *CENTRAL 6386*
**NOTTINGHAM** Pavilion Building, Pavilion Road West Bridgford *NOTTINGHAM 83481*
**LONDON** 22-24 Bermondsey Wall West, S.E.16 *BERmondsey 4533*

## CLASSIFIED ADVERTISEMENTS

*CLASSIFIED ADVERTISEMENTS should be addressed to THE MANAGER, Classified Advertisements, MODERN TRANSPORT, Russell Court, 3-16 Woburn Place, London, W.C.1.*

*RATES.—The minimum charge for classified advertisements is 7s. for 14 words or less, and 6d. for each additional word. The name and address of the advertiser is charged at the same rate. If a box number is used 2s. extra is charged to cover our name and address and postage. If set in paragraph form each paragraph is estimated separately. Official Notices and semi-display in the classified columns are charged at the rate of 40s. per single column inch.*

**PUBLICATION**

NINETEENTH CENTURY RAILWAY CARRIAGES by C. Hamilton Ellis. Profusely illustrated—obtainable from the publishers.—MODERN TRANSPORT Publishing Co., Limited, 3-16 Woburn Place, London, W.C.1. Price 22s. including postage.

**FACTORIES AND WAREHOUSES FOR SALE**

SOUTH Midlands, Watling Street, A5 (50 miles from London). Most substantial brick and steel building; 4,650 sq. ft.; good parking, loading and head room; prominent site and space for extension; suitable storage and distribution depot, bottling store or transport repairs, etc.; freehold £6,000; quick sale wanted. Apply A. C. Frost and Co., Estate House, Gerrards Cross. (Telephone 2277/8.)

**MODERN TRANSPORT**

*The Transport Newspaper with the World-Wide Reputation*

NINEPENCE WEEKLY

*Annual Subscriptions:*
GREAT BRITAIN AND IRELAND 35s.
ELSEWHERE ABROAD - 35s.
CANADA - 32s. 6d.

Why the big operators choose...

BP ENERGOL AUTOMOTIVE LUBRICANTS

Part of the transporter fleet of The Autocar and Transporters Ltd., Alvechurch, B'ham.

"... we have noticed a great reduction in maintenance costs—which has been evident in longer engine life, and economy in replacement parts"

*say* THE AUTOCAR AND TRANSPORTERS LTD
ALVECHURCH, NR. BIRMINGHAM

"I feel that you will be interested to see this photograph of part of our fleet of transporters", writes MR. R. H. WILSON, of the well-known Alvechurch, Birmingham firm, Autocar and Transporters Ltd. "Perhaps this is a good occasion to express my appreciation of the first-class service and courteous attention we always receive from all members of your company. The fleet runs on Power Petrol and Power Diesel which always give the most satisfactory results, and since we have been using BP ENERGOL Lubricants and BP ENERGREASE we have noticed a great reduction in maintenance costs—which has been evident in longer engine life, and economy in replacement parts."

*Distributors:*
THE POWER PETROLEUM CO. LTD
*Head Office:* 76/86 STRAND · LONDON W.C.2. *(Branches and Depots throughout the Country)*

*a subscription to* MODERN TRANSPORT
*brings you in touch with all*
BRITISH AND FOREIGN TRANSPORT DEVELOPMENTS

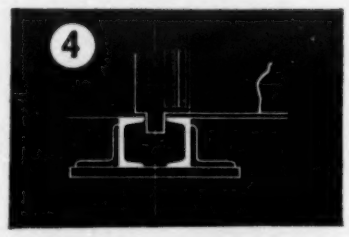
The only fully suspended shutter door

Only Rax doors have all these exclusive features

1 Rustless steel dividing sections between leaves.

2 Weight of leaves additionally supported at points shown. No dropping and consequent trouble through shutter leaves rubbing on threshold.

3 Normal shutter door leaves supported at one point only.




4 Special easy clean combined bottom guide and drain gulley.

*Send for illustrated literature to Department* 4.

RAX
POTTER RAX LIMITED
Wilton Works, Shepperton Road, London, N.1.
Telephone: CANonbury 6455 (4 lines)
Telegrams: Encraxgat, Nordo, London.
Manchester:—New Union Street, 4.
Telephone: COLlyhurst 2018.

BRANCHES AT:—BIRMINGHAM, LIVERPOOL, DUBLIN, BELFAST, NEWCASTLE-UPON-TYNE, BRISTOL, PLYMOUTH, EXETER.

## ROAD LICENSING IN ISLE OF MAN

### Plea for Revised System

AN appeal to bring up to date the method of licensing of public service vehicles in the Isle of Man to conform with the system in Great Britain was made by Mr. A. C. Teare, who is a Member of the House of Keys, in his speech as chairman of the Isle of Man Railway Company, at the annual meeting. It was under many disadvantages, he said, in the island regarding the operation of its services.

In Britain the licensing of public service vehicles was directed towards the provision of transport services in an economical manner, in order to give the regular operator the security of business necessary to enable it to find the cost of operating services that were unprofitable, but nevertheless important to the public. In other words, the traffic commissioners refused to licence competitors who wanted to share profitable services without taking a share of unprofitable ones

**Passenger and Goods Vehicle Licensing**

In the Isle of Man there were more public service vehicles outside the provisions of the Road Traffic Act than were brought within it, giving rise to wasteful competition over which there was no central or co-ordinated control. It was in the public interest that the licensing of public service vehicles should be brought up-to-date, in conformity with the system in Great Britain, so that adequate and efficient services could be maintained. There was also a pressing need for a licensing system for goods vehicles similar to that which had been in force in England for the past 25 years.

Reviewing the year's working, Mr. Teare said the total receipts amounted to £81,885, the expenses £77,310, and the net receipts to £4,575. Compared with 1957 these results showed a decrease in receipts of £4,715, and a saving of £2,275 in expenditure, the net receipts being less by £2,440. The 1958 season had been disappointing due to fewer arrivals of visitors to the island and the unsettled weather, but it was noteworthy, added Mr. Teare, that the passenger traffic showed a decrease of only 1.8 per cent. It was not easy to pinpoint the reasons for the disappointing season, but the deflationary measures enforced by the British Government in 1957 laid heavily on the shoulders of trade and industry, resulting in a rise in the level of unemployment.

**Economies**

On the expenditure side the company was again concerned with an advance in rates of pay which, incidentally, were now almost four times those of prewar days. Higher national insurance contributions also added to the costs, but against these adverse factors and increased expenditure on maintenance of way and works, it was able to effect economies in mileage, which reduced the cost of locomotive power and traffic expenses, so that on balance they had a saving of £2,275.

The sum of £4,575 was carried to net revenue, and after adding the balance from the previous year, investment income, dividend from subsidiary company and amounts transferred from general reserve and renewal fund, and deducting debenture interest and rent charges, there remained the sum of £7,087. The directors recommended the payment of the usual dividend of 5 per cent on the preference shares (£2,500) and a 2 per cent dividend on the ordinary shares, the latter being an approximation to the 2½ per cent paid on the ordinary shares over the preceding 16 years. After taking £1,500 from general reserve there was a balance of £1,787 to be carried forward.

**Loss on Road Services**

With regard to the subsidiary (the Isle of Man Road Services) Mr. Teare said it was inevitable that with the decline in summer traffic the results would be less favourable than in the previous year, and there was also a substantial wage award. These awards had to be conceded automatically in the island following upon similar awards made under entirely different economic conditions in Great Britain.

It was becoming increasingly difficult to absorb them. It meant the continual pruning of unprofitable services, more especially those in the rural areas, which were a problem at the best of times. Although adjustments were made in the current winter timetable, a loss was incurred by their subsidiary, after making the necessary provision for depreciation.

★

## BRITISH RAILWAYS AND THE TRADER

(*Continued from page* 13)

ties, some of which are relatively light, the payload capacity of the railway van is far less than that of a road vehicle of the same platform size.

**Training of Staff**

It seems to me that one of the most important problems with which the railways are faced in competitive conditions is the creation of the right climate of opinion throughout the chain of management. It is never an easy task to change attitudes, but when attitudes are conditioned very largely by tradition and, in a number of cases, almost by inheritance, it is even more difficult to change them. What is now required is a spirit of adventure, and I am glad to see that in high places there is already some evidence of this, and a willingness to take calculated risks. Such can be achieved to a very large extent by an example from the top, but they should be aided by extensive training, particularly in the commercial field.

I am certain that the railways still have a most important role to play in the future transport activities of this country, but this role must of necessity be found in a much narrower field of activity than that covered at the present time. I would like once again to emphasise—and here I feel sure I am speaking for a large number of important customers—that we are anxious to help the railways to help themselves, and that we shall be the better able to do this when we have more detailed knowledge of the traffics (with the routes, the areas, etc.) for which, as a result of the development of the modernisation scheme and such other streamlining as can be accomplished, the railways will be able to offer the best services on the most attractive and competitive terms.

# SOCIAL AND PERSONAL

### Inland Waterways Committee

AS foreshadowed in the recent White Paper on Canals, the Minister of Transport has set up an Inland Waterways Redevelopment Committee. Admiral Sir Frederick Parham, G.B.E., K.C.B., D.S.O., late Commander-in-Chief, Nore, has been appointed chairman. The other members are:

Mr. G. C. Godber, LI.D., Clerk to the Salop County Council; member of the Committee of Inquiry into Inland Waterways (the Bowes Committee).

Wing Commander R. G. Grant-Ferris, Member of Parliament for Nantwich.

Mr. James Johnson, Member of Parliament for Rugby.

Sir Geoffrey Lowles, member of council of the Royal Yachting Association; patron, Northern Waterways Association; member, Surrey County Council 1946-55.

Mr. W. A. Muddell, J.P., chairman of the River Boards' Association; chairman of the Trent River Board; member of the Committee of Inquiry into Inland Waterways (the Bowes Committee).

Captain L. R. Munk, Assoc.I.N.A., managing director, Maid Line Cruises, Limited; chairman of Association of Pleasure Craft Operators on Canals; chairman, Inland Waterways Association; chairman, Upper Thames Ship and Boat Builders Association; chairman, Kennett and Avon Canal Association; director, National Boat Shows, Limited.

Mr. L. T. C. Rolt, an engineer and a well-known writer on canals and on engineering achievements of the 19th century; member of council of the Newcomen Society.

Mr. John Smith, director, Coutts and Company, Rolls-Royce, Limited, Royal Exchange Assurance, etc.; member of the executive committee of the National Trust.

Mr. Trevor Williams, clerk to the Wrexham Rural District Council.

The secretary will be Mr. S. G. Griffith, O.B.E., Ministry of Transport, Berkeley Square House, London, W.1.

* * *

Mr. W. E. Waite, A.M.Inst.T., hitherto head of traffic planning, at North Eastern Region headquarters, York, has been appointed district operating superintendent, Leeds. Mr. Waite began his railway career in 1925 with the former L.N.E.R. and in 1930 was awarded a traffic apprenticeship. At the outbreak of war he was assistant yardmaster at Hull. Later he served with the Royal Engineers in several commands with the rank of lieutenant-colonel. He was particularly associated with the "Aid to Russia" effort through Persia and Iraq, and towards the end of the war was in command of movements and transportation in Syria and the Lebanon. Since the war Mr. Waite has held the appointments of yardmaster, Lincoln, assistant to district operating superintendent, Nottingham, acting district operating superintendent, Leeds Central, and productivity assistant to the chief operating superintendent.

Mr. W. E. Waite

* * *

Mr. Lewis Dobson has joined the Equipment and Engineering Co., Limited, as a representative in succession to the late Mr. L. Stewardson. He was previously with Transport Vehicles (Daimler), Limited.

* * *

Mr. D. L. Brown, M.I.Mech.E., A.M.I.C.E., M.I.Gas.E., A.F.R.Ae.S., has been appointed deputy manager of the Smiths aviation division research department at Cheltenham. He joins the division from the School of Gas Turbine Technology, Farnborough, where he was principal.

* * *

Mr. W. T. James, chairman of the South Wales Transport Co., Limited, recently presented to employees of the company awards for long service. One employee received a 50-year award; there were three awards for 40 years, and another six received certificates for 25 years' service. To date the company has 253 employees still working who have gained 25, 40 and 50 year awards respectively.

* * *

The Eastern Region announces the appointment of Mr. J. B. Manson, B.Sc.(Eng.), A.C.G.I., A.M.I.C.E., assistant district engineer, Stratford, as district engineer, Peterborough, in succession to Mr. J. H. Glendinning, who has retired. Mr. Manson joined the L.N.E.R. in 1939 as an engineering graduate. Since February, 1956, he had been assistant district engineer, Stratford.

* * *

We record with regret the death of Mr. Glyn Jenkin-Jones, chairman and managing director Aber Carriers (1954), Limited, of Welshpool. Mr. Jenkin-Jones, who was 60, founded Aberystwyth Carriers in 1920 with two Daimlers bought from the Slough dump and established a Central Wales smalls service after moving to Welshpool in 1930. The business was nationalised in 1949 but re-established as a private concern when denationalisation began.

* * *

Mr. D. W. Glassborow, senior economics assistant in the budgets division of the British Transport Commission finance department, has been given the new designation of economics officer. In the mechanical engineering department of British Railways Central Staff, Mr. W. Vandy, assistant carriage and wagon engineering officer, has been redesignated mechanical engineer (works and production); and Mr. J. J. Finlayson, assistant mechanical and electrical engineer, London Midland Region, Derby, has been appointed mechanical engineer (general) as from March 31.

* * *

The Regent Oil Co., Limited, announces that its managing director, Mr. R. Walton Ball, retired on March 31 after 28 years with the company and its predecessors. He will, however, remain on the board in an advisory capacity. Mr. Ball joined Trinidad Leaseholds, Limited, in 1931 as a representative, but was shortly made manager of the London and Home Counties branch. Since the Regent company was formed in 1948, he had held the positions of sales manager, light oils; general sales manager and sales director. He was appointed managing director in September, 1949.

* * *

The death is announced of Mr. Paul W. Litchfield, honorary chairman of the board of directors of the Goodyear World Wide Organisation. He was 83. "Grand old man" of the world's rubber industry, and a well-known international figure, Mr. Litchfield had been associated with Goodyear for nearly 59 years. He was elected president of the company in 1926 and made board chairman and re-elected president in 1930. In 1940 he was named board chairman and chief executive officer. In April, 1956, he handed over his responsibilities as chief executive of the Goodyear organisation to Mr. E. J. Thomas, president of the company, and later took the title of honorary chairman of the board.

The Westinghouse Brake and Signal Co., Limited, announces that Mr. G. W. Dunkley, O.B.E., was appointed a director of the company on March 25.

* * *

Mr. J. A. R. Kay, joint managing director of Hawker Siddeley Aviation, Limited, has been appointed managing director of A. V. Roe and Co., Limited. Sir Roy Dobson has relinquished that post to concentrate on the activities of the Hawker Siddeley group, of which he is managing director. Mr. S. G. Joy becomes general manager of A. V. Roe and joins the board.

* * *

With the retirement of Major-General B. K. Young from the post of director-general of the Royal Society for the Prevention of Accidents on April 1, he was succeeded by the former deputy director-general, Brigadier R. F. E. Stoney. Mr. R. F. E. Howard-Hodges, head of the Public Safety Division, became the deputy director-general.

* * *

Sir Bernard Docker, chairman of the Birmingham Railway Carriage and Wagon Co., Limited, is to be managing director. He succeeds Mr. H. J. S. Moyses, deputy chairman, who has been managing director for 38 years. Mr. J. Arthur Reid, director and secretary, becomes assistant managing director. Mr. Moyses will continue as deputy chairman.

* * *

Mr. S. J. Symes, whose appointment as district traffic superintendent, Stoke-on-Trent, London Midland Region, B.R., is announced, joined the London Midland and Scottish Railway in 1933 as a traffic apprentice, and after gaining initial experience at Cheddington, Northampton, Willesden, Leicester and London, he became district inspector at Bletchley in 1939. As a territorial he was called up in 1939, serving with the Royal Engineers in the Middle East. He returned to the railways in 1946 and in 1947 was appointed passenger assistant at Stoke. In 1955 Mr. Symes went to Euston as head of the passenger development section in the chief commercial manager's office, and in 1956 he became assistant district passenger manager, Euston. When the divisional traffic manager's office in London was set up in 1958 Mr. Symes became head of section (passenger services) in the new organisation, the position he now vacates. Mr. Symes is the son of a former L.M.S.R. stores superintendent.

Mr. S. J. Symes

* * *

Twenty-five members of the civil engineering staff of the British Transport Commission, British Railways, London Transport and British Waterways are undergoing a special post-graduate course at Leeds University during the Easter vacation. The curriculum is based on two main subjects—soil mechanics and prestressed concrete—and instruction will be given by senior members of the Commission's engineering staff as well as lecturers from the University's Department of Civil Engineering.

* * *

Mr. C. Gosling has been appointed as commercial vehicle sales manager for Trojan, Limited, of which company Mr. J. D. McGregor is now general sales manager. Mr. Gosling was formerly works manager for Lambretta Concessionaires, Limited (whence Mr. McGregor also comes), and his move has followed the acquisition of Trojan by that company. Well known to most fleet operators in London and the provinces, Mr. Gosling has had considerable experience in the commercial vehicle world, having been manager of Express Motor and Body Works, Limited, the coachbuilding and engineering works at Tooting, for six years. He is a member of the Institute of British Carriage and Automobile Manufacturers and of the Institute of Road Transport Engineers.

Mr. C. Gosling

* * *

Mr. R. H. C. Hackshaw, operating superintendent, Rhodesia Railways, Bulawayo, is to proceed on pension at the end of April, but will become the Rhodesia Railways agent at Lourenco Marques.

* * *

Mr. G. R. Weir, a senior ship surveyor, has been appointed principal surveyor for tonnage in the Ministry of Transport, in succession to Mr. L. B. Hislop, M.I.N.A., who has become a deputy chief ship surveyor.

* * *

At the request of the lecturer, Captain E. V. Rickenbacker, chairman of Eastern Air Lines, Inc., of the United States, the 1959 Brancker memorial lecture of the Institute of Transport arranged for April 13 has been postponed to September 14. The meeting will then take place at 5.45 p.m. in the Jarvis Hall of the Royal Institute of British Architects, 66 Portland Place, London, W.1, and will be open to visitors, without ticket. The subject will be "World Peace Through Air Transportation." There will be no meeting of the Institute of Transport in London on April 13.

* * *

In consequence of the retirement of Mr. J. G. McDonnell, traffic superintendent of Birmingham City Transport, the Transport Committee has appointed as traffic superintendent Mr. W. A. J. Mitchell. He has been in the service of the department since 1923 and prior to this appointment was deputy traffic superintendent. Mr. Mitchell is in turn succeeded by Mr. T. Hayes, who joined the department in 1924 and previously occupied the post of assistant traffic superintendent. These appointments took effect from April 1. Mr. McDonnell joined the undertaking in 1915 at Kyotts Lake Road tramcar overhaul works. In 1928 he became superintendent at Acocks Green garage and in 1935 chief examiner of drivers. In 1946 he became assistant traffic superintendent and in 1951 traffic superintendent.

Daily door-to-door express container services in own ships to and from NORTHERN IRELAND

- All parts of Northern Ireland, Scotland and England served
- Greatly Minimised Risk of Loss by Theft or Damage
- Free Insurance (General Merchandise) — £800 per ton
- Closed Security-Locked Containers
- Insulated Containers for Perishable Foodstuffs — for Hygiene and Cleanliness
- Open Containers and "Flats" for Unpacked Machinery etc.
- All Goods Conveyed with Minimum Packing

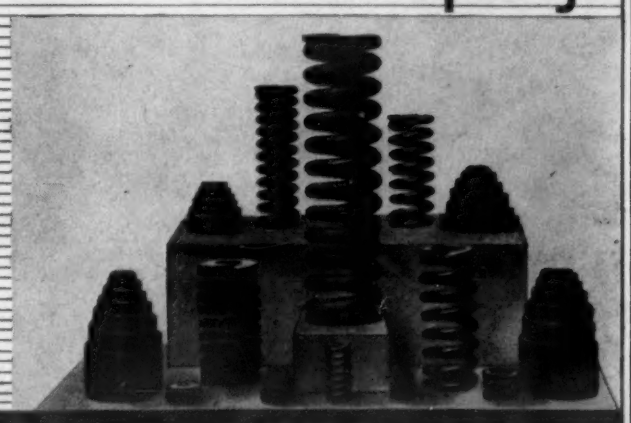
Door-to-door inclusive rates

ANGLO-CONTINENTAL CONTAINER SERVICES
(London) Ltd and (Belfast) Ltd

LONDON 79 Dunton Road SE1 *Bermondsey 4881/4* (Head Office) and Elland Road SE15 *New Cross 4885/7* (Traffic Depot) PRESTON The Docks *Preston 86742/4* LARNE (Northern Ireland) Bay Road *Larne 2331/2* BELFAST 35/39 Middlepath Street *Belfast 59261/5* MANCHESTER 2 270/1 Royal Exchange Buildings *Blackfriars 9287/9* GLASGOW 10 Bothwell Street C2 *City 6997/8* ARDROSSAN (Ayrshire) Harbour Street *Saltcoats 1911/2* BRISTOL 61 Park Street *Bristol 25435/6*

SUBSCRIPTION RATES
BRITISH ISLES 35s.
CANADA 32s. 6d.
ELSEWHERE OVERSEAS 35s.
Per annum Post Free
THE PUBLISHER
MODERN TRANSPORT, 3-16 WOBURN PLACE, LONDON, W.C.1

Spiral and Volute Springs for Railway and General Engineering purposes



TURTON PLATTS & CO LTD.
MEADOW HALL RD., SHEFFIELD.
Tel. No. 36921. 'Grams: Buffer, Sheffield. London Office BUSH LANE HOUSE, CANNON ST., E.C.4

## IMPORTANT CONTRACTS

# Two More Commercial Vehicle Ferries

TENDERS from the Ailsa Shipbuilding Co., Limited, Troon, for the construction of two drive-on drive-off road vehicle ferries at a price of about £800,000 each have been accepted by the Atlantic Steam Navigation Co., Limited. The new ships, which will be similar in design to Atlantic's latest vessels, *Bardic Ferry* and *Ionic Ferry*, but slightly larger, are intended for the company's Tilbury—Antwerp and Preston—Larne services. Each will be capable of carrying about 100 road haulage vehicles and will have extensive accommodation for goods containers as well as for 35 lorry drivers and passengers. Both will be twin-screw diesel-powered and fitted with stabilisers. The first is expected to be available at the end of 1960 and the second early in 1961.

### Repeat Order From Devon General

A recent order for six A.E.C. Reliances for Devon General Omnibus and Touring Co., Limited, will involve these vehicles joining a fleet of over 250 A.E.C. buses and coaches already in operation. These latest Reliances have synchro-mesh gearbox, R.P. lubrication, vacuum brakes, twin-wind tone horns and microphones. The Willowbrook bodywork seats 41 passengers.

### North Eastern Region Contracts

Recent contracts placed by the North Eastern Region of British Railways include:

Tarslag, Limited, Stockton-on-Tees, for retaining walls, foundations, ducts and drainage at Darlington North Road Locomotive Works.

Lansing Bagnall, Limited, Basingstoke, for two diesel industrial tractors for Bradford Forster Square.

I.T.D., Limited, Birmingham, for electric platform trucks and equipment for Stockton Goods Depot.

Ransomes Sims and Jefferies, Limited, Ipswich, for two runabout cranes and spare batteries for Newcastle Forth Goods Station.

### U.S. Government Buys British

Britain's dollar account will benefit to the extent of some $3,500,000 by a contract recently placed by the United States Government with Marconi's Wireless Telegraph Co., Limited, with which is associated the Automatic Telephone and Electric Co., Limited. The order is for a mobile micro-wave telephone and telegraph communication system linking many of the United States Air Force bases in the United Kingdom. The system, which will comprise a number of self-contained mobile stations, has been planned jointly by the two British companies.

### Orders for Aircraft Tractors

Orders placed with David Brown Construction Equipment, Limited, of Feltham, Middlesex, during recent weeks for industrial wheel tractors and equipment amount to a total value of approximately £125,000. This covers the supply of more than 100 specially equipped tractors for use on airfields, docks and harbours in many countries. The largest single contract is from the Ministry of Supply for 55 tractors, all diesel models, to be used by research establishments and on experimental airfields. All except six of these machines are Turbo Taskmaster tractors. Coincident with the supply of Comet 4 air liners, the de Havilland Aircraft Co., Limited, has placed an order for 12 David Brown Turbo Taskmaster Super tractors on behalf of Aerolineas Argentinas.

### Flat Cars for Piggyback Service

An order for 400 steel flat cars has been placed with the National Steel Car Corporation by Canadian National Railways. The flat cars will each be 46 ft. in length and are designed especially for piggyback service. Delivery, which will bring the total fleet to more than 700 of this type, is expected to be completed by August of this year. Due to the enthusiastic response of the motor industry to the CNR-designed double-deck auto transporter, introduced in 1957, an order has been placed for 125 additional units. Scheduled for delivery in 1959, they will bring the fleet to 150.

### New Contracts Placed by Western Region

The Western Region of British Railways has announced that the following contracts have been placed:

Fisher and Ludlow, Limited, Birmingham, 12, for supply and erection of an overhead storage platform and open type steel shelving at the R Stores, Carriage and Wagon Works, Swindon.

Fuel Furnaces, Limited, for supply and erection of two quenching machines, one charging machine and one oil cooler at the case hardening shop, Swindon Locomotive Works.

A. N. Coles (Contractors), Limited, Plymouth, for earthworks, inspection pits, drainage and fuel storage in connection with fuelling and inspection facilities for diesel working at Newton Abbot Running and Maintenance Depot.

Nott, Brodie and Co., Limited, Bristol, 3, for construction of a fuel storage depot, examination pit, amenities block and drainage in connection with fuelling facilities for diesel railcars at Westbury.

Cowans, Sheldon and Co., Limited, Carlisle, for supply and erection of one 2-ton electrically operated capstan at Merthyr Plymouth Street Goods Depot.

★

## TENDERS INVITED

**THE following items are extracted from the Board of Trade Special Register Service of Information. Inquiries should be addressed, quoting reference number where given, to the Export Services Branch, Board of Trade, Lacon House, Theobalds Road, London, W.C.1.**

**April 14—Australia.**—Department of Civil Aviation for one airfield RUNWAY SWEEPER-COLLECTOR. Tender documents from the Office of the High Commissioner for Australia, Australia House, Strand, London, W.C.2, quoting Schedule No. C.854.

**April 15—Norway.**—Bergen Town Council for a complete CABLE SUSPENSION RAILWAY for passenger transport from Haukeland (inner district of Bergen) to a point immediately below the summit of the Ulriken mountain peak. All details (in Norwegian) from Export Services Branch, B.o.T. (ESB/6778/59.)

**April 15—Ceylon.**—Ministry of Transport and Works for large quantities of 80-lb. F.B. RAILS and ACCESSORIES. Details from the Crown Agents for Overseas Governments and Administrations, 4 Millbank, London, S.W.1.

**April 20—Thailand.**—State Railways for 10 DIESEL RAILCAR SETS with SPARE UNITS. Photocopies of tender documents from Export Services Branch, B.o.T., price 38s. (ESB/6809/59.)

**April 20.—Portuguese East Africa.**—Ports, Railways and Transport Department for supply and complete installation of a 100-ton LOCOMOTIVE TURNTABLE in the marshalling yard in Lourenço Marques. Tenders to the Ports, Railways and Transport Department, Lourenço Marques. (ESB/2908/59.)

**April 20—Ceylon.**—Ministry of Agriculture and Food for six 1½-ton forward-control 300 cu. ft. petrol-engined VANS; five 3-ton forward-control diesel-engined CHASSIS-CABS and one four-wheel-drive PICK-UP TRUCK with canopy. Tenders to the Chairman, Tender Board, Ministry of Agriculture and Food, Union Place, Colombo, 2. (ESB/7432/59.)

## SHIPPING AND SHIPBUILDING

# Rail Rates for South Wales Docks

FROM May 1 British Railways is introducing its new rates for merchandise (with certain exceptions) through the ports of Newport, Cardiff, Barry, Swansea and Port Talbot, inclusive of rail conveyance within the docks, loading into wagon (imports) and unloading from wagon (exports). Transit shed services, shipping from quay to vessel or receiving from vessel to quay, will continue to be excluded from the railway rate. The practical effect of this change will be that on railborne traffic forwarded after April 30, 1959, the dock labour charges for consignments passing through shed will be substantially reduced, and no dock labour charges will be incurred when the traffic is handled direct from, or to, ship. The following traffics will be exceptions to this procedure:

Timber; liquids in bulk; solids in bulk; loose traffic (such as bricks, slates, etc.); returned bogies; and meat; also traffic of all descriptions destined to, or emanating from, the South Wales area south and west of a line drawn from Severn Tunnel Junction to Abergavenny, thence to Carmarthen and thence along the railway line to Lampeter and Aberayron (inclusive of these stations), and for these British Railways will introduce new rates, inclusive of rail conveyance only within the docks.

Wholly excluded from these arrangements will be:

(i) consignments of less than 2 tons;
(ii) coal, coke and patent fuel;
(iii) livestock;
(iv) rail vehicles on own wheels;
(v) local and bulk traffics at present passing under consolidated dock charges arrangements.

Interested traders are invited to make immediate application for the new rates, locally or direct to the commercial officer, Western Region, British Railways, Paddington. It will assist considerably, and enable prompt quotations to be given, if traders provide the fullest possible information, particularly as regards the nature of the traffics and the probable size of the consignments. The Industrial Association of Wales and Monmouthshire says that

(*a*) the importer or exporter of qualifying traffics passing direct to or from main line will be relieved of the labourage charge for receiving to or shipping from rail vehicles; or
(*b*) dock charges on qualifying rail-borne traffics dealt with through dock transit sheds will be subject to a substantial reduction.

Dock dues on goods (wharfage) will continue to be payable as at present and apply to both (*a*) and (*b*).

### *Posts Instead of Funnels*

THE *Manchester Miller*, a single-screw turbine-driven cargo liner for Manchester Liners, Limited, has been handed over to her owners by Harland and Wolff, Limited. The vessel, which is the first to be built for these owners by Harland and Wolff, is for the North Atlantic service. An unusual feature is the provision of twin streamlined posts in place of a conventional funnel to deal with the exhaust from the boilers. The *Manchester Miller* has a length overall of about 468 ft. and her gross tonnage is about 8,600 tons.

### *Italian Building Grant Extended*

THE Italian Mercantile Marine Ministry has granted requests for a State grant towards the building of 25 merchant ships totalling 273,150 gross tons. The government is committed to the extent of 4,758,000,000 lire under this grant. Since the law providing for State grants for shipbuilding was enacted in July, 1954, a total of 229 ships of 2,199,503 gross tons has qualified for the grant. So far, the State has granted 80,000 million lire for shipbuilding. Among the ships built were 85 vessels totalling 742,781 tons constructed for foreign owners.

### *Strome Ferry Improvement*

A NEW ferry accommodating six cars is to be put into use on the Strome ferry service in Ross and Cromarty. It is expected to go into use in early June and should relieve the congestion on this route which has been the subject of considerable discussion. In a new timetable the ferry will operate from 8 a.m. to 9 p.m. B.S.T., or lighting-up time, whichever is earlier. After 9 p.m. a surcharge would be charged.

### *British India Cadet Ship*

TO invest in a new and modern cadet ship providing facilities both for deck and engineer cadets is a costly and uneconomical business. On the other hand the British India Steam Navigation Co., Limited, has recognised the need to move with the times in order to facilitate the flow of future officers in both categories, trained in the company's traditions. With these thoughts in mind, British India has had modifications carried out in the cadet ship m.s. *Chindwara*. Built on the Tyne in 1950 by Swan, Hunter and Wigham Richardson, the *Chindwara*, of 7,525 tons gross, was the first postwar ship of the British India fleet redesigned to incorporate a large number of cadets. The modifications have been primarily to increase the total number of cadets carried from 39 to 52 but steps have been taken to improve study, messing and recreational facilities incorporating air conditioning on a limited scale. At the same time, provision has been made for up to six engineer cadets.

★

## FINANCIAL RESULTS

**NOTES on the trading results, dividends and financial provisions of companies associated with the transport industry are contained in this feature, together with details of share issues, acquisitions and company formations or reorganisations.**

### Skefko Ball Bearing

In 1958 the Skefko Ball Bearing Co., Limited, earned a net profit of £610,373 (£596,885) and dividend is 12 per cent (11 2/9 per cent).

### James Booth

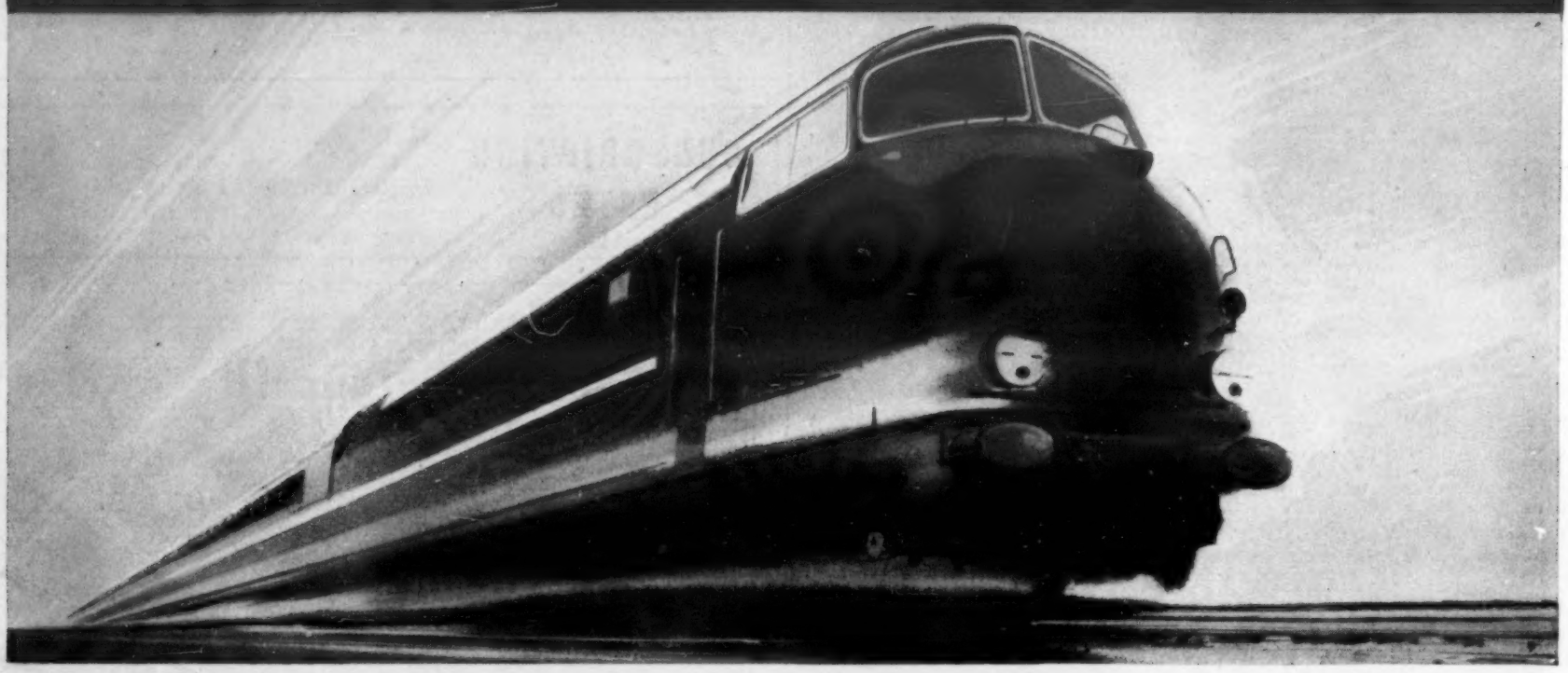
No dividend is to be paid on the ordinary of James Booth and Co., Limited, for 1958 (9 per cent). Group net profit £104,143 (£141,417) after tax of £31,194 (£158,101). To general reserve £50,000 (£156,358).

### Birmingham Railway Carriage

The Birmingham Railway Carriage and Wagon Co., Limited, reports a net profit for 1958 of £98,836 (£63,014) and dividend 10 per cent Current assets £3,002,516 (£2,809,096), liabilities £1,427,193 (£1,262,461). Sir Bernard Docker, chairman, says orders for railway wagons are "very poor."

MAYBACH POWER

COMES TO BRITAIN



Armstrong Siddeley are now manufacturing under licence a range of diesel engines from 220 to 2,000 b.h.p. rail traction rating developed by the world famous German firm of Maybach, who have had 35 years experience in the manufacture of diesel traction units. Armstrong Siddeley Maybach diesel engines are currently being introduced into British Railways Western Region as part of their modernisation programme.

ARMSTRONG SIDDELEY Maybach DIESEL ENGINES

ARMSTRONG SIDDELEY MOTORS | COVENTRY · ENGLAND | MEMBER OF HAWKER SIDDELEY GROUP

ENGINE BUILDERS TO THE WORLD

Printed by Odhams (Watford) Limited, St. Albans Road, Watford, Herts, for and published by Modern Transport Publishing Co., Limited, Russell Court, 3-16 Woburn Place, London, W.C.1.